

Court's prior opinions. See, e.g., *Rowe Int'l Corp. v. Ecast, Inc.*, 241 F.R.D. 296, 298-99 (N.D. Ill. 2007). The Court will restate them only briefly here. Each of the patents-in-suit involves computer jukeboxes and computer jukebox networks. Prior to the development of computer jukebox systems, conventional jukeboxes contained vinyl records, compact discs, or digital music files. These conventional systems required the jukebox to house all the songs available for selection, thereby requiring the jukebox operator to visit each jukebox to update the music available. The operator also would visit the jukeboxes to collect money, information regarding how often songs were played, and other data. The song selections necessarily were limited by the storage space available at each jukebox.

The computer jukeboxes that are the subject of the patents at issue in this case have a central management station that can distribute digital music to multiple jukeboxes. The central management station also stores advertisements and other information that can be transmitted to the jukeboxes. The computer jukebox system also allows the jukeboxes to store certain songs (for example, those that are frequently played), so that they do not have to be transmitted from the central management station repeatedly. In addition, the central management station can collect data regarding the songs being played, fees collected, etc., thereby eliminating the need for an operator to regularly visit each computer jukebox.

Discussion

Summary judgment is appropriate if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to

judgment as a matter of law." Fed. R. Civ. P. 56(c). When determining whether a genuine issue of material fact exists, the Court must view the facts in the light most favorable to the nonmoving party and draw all reasonable inferences in its favor. See *Anderson v. Liberty Lobby*, 477 U.S. 242, 248 (1986); *Lesch v. Crown Cork & Seal Co.*, 282 F.3d 467, 471 (7th Cir. 2002). Because the Court is presented with cross-motions for summary judgment in this case, it must consider each party's motion separately and draw all reasonable inferences against the party whose motion is under consideration. See *Crespo v. Unum Life Ins. Co. of Am.*, 294 F. Supp. 2d 980, 991 (N.D. Ill. 2003) (citing *Brownlee v. City of Chicago*, 983 F. Supp. 776, 779 (N.D. Ill. 1997)).

I. Plaintiffs' motion for summary judgment

Plaintiffs move for summary judgment on infringement of claims 1 through 6 of the '189 patent, claims 1 through 6, 9 through 11, 15, and 21 through 21 of the '575 patent, defendants' inequitable conduct defenses, and the invalidity of the '350 patent, certain claims of which Ecast asserts in its infringement counterclaim.

A. Possibility of direct infringement of the '189 and '575 patents

The Court begins with a point to which the parties devote relatively little attention. Defendants argue that the Court should deny summary judgment as to infringement of claim 1 of the '189 patent and claims 1, 15, and 22 of the '575 patent because no one defendant directly infringes any of these claims, in the sense of practicing every element of the claim. See *Warner-Jenkinson Co., Inc. v. Hilton Davis Corp.*, 520 U.S. 17, 40 (1997). Defendants contend that Rock-Ola and View make jukebox components and that Ecast contributes a memory "that makes the system work" as well as a

network. Def. Opp. Br. at 4. The operators of the individual jukeboxes put all of these things together “to create a working system,” *id.*, defendants say, likening them to the surgeons in *Cross Medical Products v. Medtronic Sofamor Danek*, 424 F.3d 1293 (Fed. Cir. 2005). In that case, the Federal Circuit refused to combine the surgeons' actions with those of the defendant medical device maker to find direct infringement of the patentees' apparatus claim. *Id.* at 1311; *see also Muniauction, Inc. v. Thomson Corp.*, ___ F.3d ___, 2008 WL 2717689, at *8-9 (Fed. Cir. July 14, 2008) (citing *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1380-81 (Fed. Cir. 2007)).

Plaintiffs respond that the only issue in the case now is whether the asserted claims are infringed, not whether the alleged infringement is direct, contributory, or induced. The latter determination can come later, plaintiffs say.

There are two interrelated problems with defendants' attempts to resist summary judgment on this basis. First, the record does not support defendants' assertion that no one of them makes, uses, or sells "a complete jukebox system." Def. Opp. Br. at 4. Specifically, the record includes an Ecast technical and promotional document setting out "the architecture of the major components" of the Ecast Jukebox & Network 2.5, which by its own terms is aimed at Ecast's customers (as well as its "partners" and technical employees). Pl. Statement of Facts, Ex. 8 at E009012. The first sentence of this document's overview section describes the Ecast system as a "wide area network consisting of consumer entertainment Jukebox units . . . and a Data Center." *Id.* at E009016. The record also includes a 2005 proposal in which Ecast lists as the "main components of [its] system" digital jukebox hardware along with its software for

jukeboxes, servers, and route management. *Id.* at E020984. Thus, in Ecast's own view of the system it markets to its customers, the jukeboxes that are supplied by Rock-Ola and View—under manufacturing and distribution contracts with Ecast, see *id.*, Ex. 15 at 21—are part of the same system as the data center Ecast itself operates. Defendants are not entitled to denial of plaintiffs' summary judgment motion on the ground that no one of them directly infringes the asserted patents.

Alternatively, even if it were not clear from the record that Ecast markets and sells a "complete jukebox system" to its customers, *Cross Medical Products* and Federal Circuit cases that have followed it hurt rather than help defendants. In *BMC Resources*, an important Federal Circuit decision on this point handed down last year, the court held that a defendant was not liable for direct infringement of the asserted patent, which disclosed a multi-step method for processing debit transactions, because it did not control every step in the process and thus did not practice each and every element of the claimed invention. *BMC Resources*, 498 F.3d at 1380. In doing so, the Federal Circuit rejected the argument that dicta in *On Demand Machine Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1334-35 (Fed. Cir. 2006), had altered the law regarding direct infringement by more than one actor. The court reaffirmed that

[i]nfringement requires, as it always has, a showing that a defendant has practiced each and every element of the claimed invention. This holding derives from [35 U.S.C. § 271(a)] itself . . . Where a defendant participates in infringement but does not directly infringe the patent, the law provides for remedies under principles of indirect infringement. However, this court has held that inducement of infringement requires a predicate finding of direct infringement.

BMC Resources, 498 F.3d at 1380 (internal citations omitted).

At the same time, however, the Federal Circuit acknowledged that a defendant "cannot avoid infringement . . . simply by contracting out the steps of a patented process to another entity." *Id.* at 1381. Liability for direct infringement, the court said, would exist for the "mastermind" that controlled such an arrangement. *Id.* Thus, the test under *BMC Resources* is whether one party effectively controls or directs others such that it can be said to practice every element of the asserted claims. See *Muniauction*, 2008 WL 2717689, at *8 (citing *BMC Resources*, 498 F.3d at 1380-81). The Federal Circuit has held in several cases, including *Cross Medical Products*, that a defendant did not exert sufficient control over other entities whose actions contributed to the asserted infringement to ground such a finding. *Cross Med. Prods.*, 424 F.3d at 1311 ("if anyone makes the claimed apparatus, it is the surgeons, who are, as far as we can tell, not agents of [defendant medical device maker] Medtronic"); see also *Muniauction*, 2008 WL 2717689, at *9 ("[t]hat Thompson[, an auctioneer,] controls access to its system and instructs bidders on its use is not sufficient to incur liability for direct infringement"); *BMC Resources*, 498 F.3d at 1381-82 (although defendant Paymentech provided certain data to debit networks, "absent any evidence that Paymentech also provides instructions or directions regarding the use of those data," there could be no inference of direct infringement); *Fromson v. Advance Offset Plate, Inc.*, 720 F.2d 1665, 1568 (Fed. Cir. 1983); cf. *Shields v. Halliburton Co.*, 493 F. Supp. 1375, 1389 (W.D. La. 1980) (direct infringement where one step of the asserted method claim was performed at the direction of, though not by, a particular defendant).

In contrast to these cases, the record in this case includes indicia of direction

and control by Ecast over Rock-Ola and View with regard to the alleged infringement. As an initial matter, the focus is properly on Rock-Ola and View and not, as defendants suggest by citing to *Cross Medical Products*, on jukebox operators (e.g., bar and restaurant owners). The claimed invention in *Cross Medical Products* required an "anchor set being in contact with bone[, a step that] is absent until the screw and anchor are put in place during surgery." *Cross Med. Prods.*, 424 F.3d at 1311. Defendants in this case likewise suggest that only upon assembly—that is, insertion of Ecast's disk drive into the jukebox hardware—by a jukebox operator could there be infringement of the asserted claims.

The analogy to *Cross Medical Products* does not hold up. In that case, the Federal Circuit construed the limitation "operatively joined" in the asserted claim to require contact with bone. Because Medtronic itself did not perform surgery and because the surgeons who might join Medtronic's accused product to bone in the course of surgery were not Medtronic's agents, Medtronic did not directly infringe. *Id.* In this case, in contrast, there is no construction requiring assembly of the computer jukebox in the manner that defendants say makes for a "working system." Def. Opp. Br. at 4. Nor do defendants argue for such a construction. Thus, the focus is on the defendants and not on the actions of jukebox operators.

The indicia of direction and control go beyond what was present in *BMC Resources*, *Cross Medical Products*, and other cases in which patentees failed to establish "mastermind"-level direction of participants in the alleged infringing activities. Specifically, the record discloses that Ecast has manufacturing and distribution

contracts with both Rock-Ola (since September 2003) and View (since April 2005). Pl. Statement of Facts, Ex. 15 at 21; *cf. BMC Resources*, 498 F.3d at 1382 (noting that the record "contained no evidence even of a contractual relationship" between defendant and other participants in the alleged infringement). Ecast regarded View and Rock-Ola as "partners" that, pursuant to these manufacturing contracts, made jukeboxes specifically designed to operate with Ecast's network service. *Id.*, Ex. 9 at 57. According to Ecast's Howard Spielman, these manufacturers "produce[] jukeboxes *for us*," meaning Ecast. *Id.* (emphasis added). Spielman also testified that Ecast has also prescribed to Rowe and View "reference designs"—in essence, technical specifications, though Spielman declined to adopt that term—that concern "the computing resources available to the juke[box], which makes our software network successful." *Id.* at 136-137, 139. In one example of these reference designs, Ecast specifies that

[t]he hardware drivers installed within the Ecast image are written to communicate with an Elo Intellitouch Serial Controller. While Ecast can be flexible to meet the demands of manufacturing, all changes must be approved by Ecast

Def. Resp. Statement of Facts, Ex. 59 at E020996. Thus, the record indicates that Ecast literally contracted out to Rock-Ola and View the jukebox hardware element of the asserted claims. See Pl. Statement of Facts, Exs. 22 & 23.

There is no suggestion that these firms were independently making jukeboxes that would work with the Ecast system. On the contrary, at least under the original contract with Ecast, View was required to obtain Ecast's permission to manufacture jukeboxes for the Ecast network, according to Spielman. See *id.*, Ex. 9 at 130-31.

In sum, even if Ecast did not provide its customers with a complete system that

integrates jukebox hardware, there is evidence from which a jury reasonably could find that the other defendants' manufacturing of jukebox hardware was subject to Ecast's direction and control. Accordingly, the Court rejects defendants' argument that summary judgment should be denied because a finding of direct infringement is impossible.

B. Plaintiffs' request to strike Dr. Meldal's declaration

Plaintiffs raise a threshold issue regarding defendants' opposition to their motion for summary judgment on infringement of the '189 and '575 patents: namely, the admissibility of a declaration by defendants' expert, Dr. Sigurd Meldal, that accompanied defendants' opposition brief. Plaintiffs argue this new declaration departs sufficiently from the non-infringement opinions and supporting analyses in Meldal's October 2007 report that it violates both the Court's expert discovery scheduling order and Federal Rule of Civil Procedure 26(a)(2)(B) and (C), which require disclosure of expert opinions and supporting analyses during discovery at the time ordered by the Court, and so should be stricken under Rule 37.¹

¹Plaintiffs invoke Rules 26 and 37 in relation to this Meldal declaration in their reply to defendants' statement of additional facts under Local Rule 56.1(b)(3)(C). They also do so in connection with another Meldal submission that supports the invalidity arguments in defendants' motion for summary judgment. In their reply brief for their own summary judgment motion, plaintiffs contend that "[j]ust like Dr. Meldal's new Declaration in support of Defendants' invalidity motion, Dr. Meldal's new Declaration here is equally late and should be stricken." Pl. Reply at 2. The Court construes this as an incorporation of the arguments made in plaintiffs' opposition to defendants' summary judgment motion.

A related issue presents itself against this backdrop of cross-motions for summary judgment and the twin new declarations by Meldal. Rule 26(e) requires litigants to supplement expert disclosures when new information renders the original expert report materially "incomplete or incorrect." But this duty to supplement does not provide an opening for wholly new opinions. See *Allgood v. Gen. Motors Corp.*, No. 02 C 1077, 2007 WL 647496, at *3-4 (S.D. Ind. Feb. 2, 2007) (quoting *Beller v. United States*, 221 F.R.D. 689, 695 (D.N.M. 2003))

(continued...)

Rule 26(a)(2)(B) provides that disclosure of the identity of a witness who will provide expert testimony

shall . . . be accompanied by a written report . . . contain[ing] a complete statement of all opinions to be expressed and the basis and reasons therefor; the data or other information considered by the witness in forming the opinions [and] any exhibits to be used as a summary of or support for the opinions.

Rule 26 thus gives the opposing party "a right to know the conclusion of [a] particular expert witness[]" with respect to a particular issue. *Salgado v. Gen. Motors Corp.*, 150 F.3d 735, 742 (7th Cir. 1998).² Expert reports must disclose how and why an expert reached the conclusions presented, and not merely the result. *Id.* at 741 n.6 (citing *Reed v. Binder*, 165 F.R.D. 424, 429 (D.N.J. 1996)); see also *Chappel v. SBC-Ameritech*, No. 05 C 7003, 2007 WL 2076028, at *3 (N.D. Ill. July 13, 2007) (basis and reasons for an expert's conclusions are "the very heart of expert disclosure" under Rule 26). Unsurprisingly, expert submissions in the form of new claim constructions fall within the rule's scope. See, e.g., *Briggs & Stratton Corp. v. Kohler Co.*, 398 F. Supp.

(...continued)

(Rule 26(e)'s "supplement or correct" provision "does not give license to sandbag one's opponent with claims and issues which should have been included in the expert witness' report"). As with violations of Rule 26(a), Rule 37(c)(1) provides for a discovery sanction in the form of exclusion of evidence for violations of Rule 26(e). Defendants, however, do not invoke Rule 26(e) in connection with Meldal's declaration in support of their summary judgment motion. Instead, they argue that it is effectively consistent with his earlier report. (This is precisely the opposite of what Rule 26(e) provides for—that is, defendants do not contend that Meldal's earlier report has been rendered materially incorrect or incomplete.) Although they have had no corresponding opportunity to respond to plaintiffs' argument that the Court should strike Meldal's other new declaration, because defendants are allowed only one brief on that motion, the Court takes the view that defendants are not attempting to use Rule 26(e) here, either.

² The substantive law of the Federal Circuit applies in this case, except with regard to procedural issues not unique to patent law. See *Vanguard Research, Inc. v. Peat, Inc.*, 304 F.3d 1249, 1254 (Fed. Cir. 2002). The Court applies Seventh Circuit precedent to the latter. See *id.*; *Wexell v. Komar Indus., Inc.*, 18 F.3d 916, 919 (Fed. Cir.1994).

2d 925, 932-33 (W.D. Wis. 2005).

The primary rationale for excluding untimely expert opinions is to avoid an unfair "ambush" in which a party advances new theories or evidence to which its opponent has insufficient time to formulate a response. *Salgado*, 150 F.3d at 741 n.6; see also *Finley v. Marathon Oil Co.*, 75 F.3d 1225, 1230-31 (7th Cir. 1996) (experts' new charts "disclosed only a few days before the start of the trial would have placed on [the opponent] a heavy burden of meeting the new evidence at trial with its own experts' analysis"); *Astrazeneca AB v. Mutual Pharm. Co., Inc.*, 278 F. Supp. 2d 491, 509-10 (E.D. Pa. 2003); *Smithkline Beecham PLC v. Teva Pharms. USA, Inc.*, Nos. 04-0215, 05-0536, 2007 WL 1827208, at *3 (D.N.J. June 22, 2007).

This rationale is reflected in Rule 37's safety-valve provision for admission of expert testimony omitted from initial Rule 26(a) disclosures when its admission is "substantially justified" or "harmless." Fed. R. Civ. P. 37(c)(1). It is also reflected in the Seventh Circuit's guidance on applying the Rule 37(c)(1) sanction. Though district courts have broad discretion to impose this sanction for violations of Rule 26(a), their exercise of this discretion is guided in this Circuit by four interrelated factors: "(1) the prejudice or surprise to the party against whom the evidence is offered; (2) the ability of the party to cure the prejudice; (3) the likelihood of disruption to the trial; and (4) the bad faith or willfulness involved in not disclosing the evidence at an earlier date." *David v. Caterpillar, Inc.*, 324 F.3d 851, 857 (7th Cir. 2003).

Although trial in this case is still some time off, there is nonetheless a risk of substantial prejudice from failures to observe discovery deadlines. Patent litigation is

typically complex and correspondingly expensive for the litigants, and this case is no exception. Moreover, summary judgment motions are the norm, as both sides in this case have shown with their lengthy motions seeking summary disposition of multiple issues. Rule 26(a)(2)(C) specifically allows the Court to set a schedule that requires expert disclosures earlier than the default of ninety days before trial. This is precisely what the Court did in this case, with the parties' agreement and only after extensive and painstaking consultation, with an eye toward the likelihood of the very summary judgment motions that the parties have now filed. Thus, the purpose of the discovery deadlines set by the Court was to have the evidence—including expert evidence, on which both sides rely heavily—exchanged well in advance of both the summary judgment deadline and the trial date, so that the parties would know where they stood on the issues. Thus, the risk of "ambush" is not lessened in this case simply because we are not yet on the eve of trial.

Applying the above principles to this case, the Court determines that the majority, but not all, of Meldal's declaration submitted with defendants' opposition brief is new for Rule 26(a) purposes. Accordingly, these portions are stricken under Rule 37(c)(1).

As noted, the basis for plaintiffs' request, reflected in their opposition to defendants' summary judgment motion and the cases plaintiffs cite there, is that Meldal's opinions in his declaration depart substantially from the ones he submitted within the Court's time frame for expert discovery. See *Trilogy Commc'ns, Inc. v. Times Fiber Commc'ns, Inc.*, 109 F.3d 739, 744 (Fed. Cir. 1997) (applying Fifth Circuit law) (upholding district court's exclusion of supplemental expert report, filed after expert

discovery deadline, that "contained new opinions and information and did not merely supplement the original report"); *Danis v. USN Commc'ns, Inc.*, 121 F. Supp. 2d 1183, 1189 (N.D. Ill. 2000) (plaintiffs' expert's affidavit, submitted after expert discovery deadline and after defendant had moved for summary judgment, "directly contradict[ed] his deposition testimony" and expert report).³ Plaintiffs call Meldal's opinions and analyses "late expert testimony first submitted during summary judgment" and contend they were "never presented during discovery" in violation of Rule 26(a). Pl. Reply at 2. By the same token, if the opinions and analyses offered by Meldal in this summary judgment phase do not differ substantially from his opinions offered in his expert report of last autumn, they are not "late" for purposes of Rule 26(a), and thus there is no risk of "ambush" and no reason to exclude Meldal's declaration. *See Solaia Tech. LLC v. ArvinMeritor, Inc.*, 361 F. Supp. 2d 797, 807 (N.D. Ill. 2005) ("[i]f the late-filed opinions are new, they must be stricken . . . Thus, the Court's first step is to determine whether the statements by [the expert] are new or contradictory opinions.").

1. Meldal on non-infringement of the '189 patent

In his October 2007 non-infringement report, Meldal opines as follows with respect to the asserted claims of '189 patents:

- The requirement, in independent claims 1 and 7, that the jukebox memory include instructions for causing the processor to "respond to" the data it receives to "control" the data's storage means these instructions prescribe

³ Another case cited by plaintiffs, *American Stock Exchange, LLC v. Mopex, Inc.*, 215 F.R.D. 87 (S.D.N.Y. 2002), is of less interest because the question there involved a party's failure to supplement timely its discovery responses under Rule 26(e)(2). *Id.* at 93-94. Plaintiffs in the present case invoke Rule 26(a) rather than Rule 26(e)(2).

"using the song size to determine where to store the file in advance of downloading the file . . . such that file storage is optimized." Meldal Resp. Expert Report ¶ 37. Meldal draws this optimization—or "efficient storage"—requirement from another of the Arachnid patents, from whose application the '189 patent "descend[s]." *Id.* ¶ 35. Meldal accords song size a key role in storage based on a passage in the '189 patent's specification. Defendants' products, Meldal opines, do not reflect any concern for storage optimization because storage has become much cheaper since the Arachnid patents were filed. Defendants' products use a file system that "does not analyze the disk storage to determine how best to maximum [sic] storage [but simply] places the data on the first available 'clusters' of fixed-size blocks" of memory. *Id.* ¶ 41. Thus, in Meldal's opinion, Ecast-powered jukeboxes do not include instructions that cause the processor to respond to data so as to control the data's storage.

- The limitation, in independent claim 7, that the management station processor compress digital song data stored in the management station's memory unit is not infringed by defendants' products because "the compression of the music [transmitted to Ecast-powered jukeboxes] occurs on a system separate from the system used to transmit the song data to Defendants' jukeboxes." *Id.* ¶ 46. Ecast receives files in compressed form from the major record labels that supply ninety percent of Ecast's content; the other ten percent, from independent labels, is

"ripped" from compact discs and compressed by an Ecast technician on computers not involved in the transmitting song data to Ecast-powered jukeboxes. *Id.* ¶ 45.

Meldal's declaration, submitted with defendants' opposition to plaintiffs' summary judgment motion, contains the following opinions with regard to the asserted claims of the '189 patent:

- Defendants' products do not control the storage of data they receive according to song size. Though the processor found in defendants' products "flag[s] the files within the directory by 'album' and 'artist name,'" it "does not respond to anything in the song data to 'control the storage.'" Meldal Summ. Judg. Opp. Decl. ¶ 6.
- "[T]he song catalog maintained on [Ecast-powered] jukeboxes and displayed to users . . . is not limited to what is available on the jukebox itself" but rather displays all licensed songs in the "Ecast repository" irrespective of their storage location. *Id.* ¶ 7. Meldal does not say which claims of the '189 patent this opinion affects; rather, he says only that "[t]he Ecast system is . . . fundamentally different than the inventions claimed" by both the '189 and the '575 patents in this respect. The Court understands this opinion to bear on independent claims 1 and 7, which disclose "a library of songs stored in the computer jukebox."
- Ecast-powered jukeboxes "do not contain identity data for each of the songs stored" because they are "designed to include song files . . . stored on a jukebox that may not be . . . displayed to an end-user—if [Ecast's]

rights to that music have been lost and the song catalog is updated." *Id.* ¶

8. Meldal's opinion on this point is not a model of clarity, but it cites to a segment of the deposition of Ecast's Howard Spielman in which Spielman explains that "[w]e have more music in our database than we make available to our jukeboxes . . . Digital rights are constantly being won and lost . . . [W]e will often acquire music in advance of our legal right to distribute it." Pl. Statement of Facts, Ex. 9 at 78:14-79:1. The thrust of Meldal's position, then, is that identifying data for songs that are available for play through an Ecast-powered jukebox are not necessarily displayed on those jukeboxes because Ecast may not have the right to make that file available to users. Meldal does not say which of the asserted claims would not be infringed under this opinion. The Court assumes that Meldal is referring to independent claims 1 and 7, both of which call for "a data storage unit for storing . . . the received song identity data for each of the songs stored." Ecast's song catalog does not incorporate the song size, song address, graphics address, or graphics size fields shown in figure 2 of the '189 patent.

- Ecast's catalog "is created independently of the songs present on any particular jukebox hard drive." Meldal Summ. Judg. Opp. Decl. ¶ 9. In contrast, plaintiffs' jukeboxes "present the end-user with the library of songs stored locally on the jukebox memory, which is a subset of the available songs maintained in the 'master library.'" *Id.* ¶ 10. Meldal does not say which of the asserted claims this opinion affects. The Court

assumes that Meldal is again referring to independent claims 1 and 7.

- The displays used in Ecast-powered jukeboxes are "off-the-shelf" displays and are not "adapted for showing . . . user attract data." *Id.* ¶ 13. Again, Meldal does not say which of the asserted claims would not be infringed under this opinion. The Court assumes here as well that Meldal means independent claims 1 and 7, both of which call for "a display adapted for showing . . . user attract data and information that identifies the songs" stored on the jukebox."

Comparing the two sets of opinions, the Court determines first that Meldal's opinion regarding song size in the declaration is sufficiently consonant with his opinion found in paragraphs 34-41 of his non-infringement report that it is not new. If anything, it is the same opinion as the one presented in Meldal's non-infringement report, minus the storage optimization element. Accordingly, the Court will not strike paragraph 6 of Meldal's declaration for purposes of plaintiff's summary judgment motion for infringement of the '189 patent.

For purposes of plaintiff's summary judgment motion for infringement of the '189 patent, the Court determines that the following paragraphs and portions thereof in Meldal's declaration are new and will be stricken under Rule 37(c)(1):

- paragraph 7, regarding the song catalog displayed to jukebox users.
- paragraph 8, regarding Ecast-powered jukeboxes' song catalogs and "digital rights." Although the opinion draws on Spielman's deposition testimony, this is insufficient on its own to apprise plaintiffs that Meldal would advance an expert opinion on this point.

- the portion of paragraph 9 regarding the data fields shown in figure 2 of the '189 patent. the portion of paragraph 9 regarding how Ecast's song catalog is created and all of paragraph 10, which contrasts this with the song catalogs presented by plaintiffs' jukeboxes.
- paragraph 13, regarding Ecast's use of "off-the-shelf" displays.

Defendants do not offer any argument that their late disclosure of these opinions is harmless or substantially justified under Rule 37(c)(1)—although, to be fair, plaintiffs' arguments seeking exclusion of Meldal's new opinions were made only in plaintiffs' reply brief (after defendants included the new declaration with their response brief), to which defendants did not have an opportunity to reply within the briefing schedule. Nonetheless, the Court determines that these late disclosures are neither harmless nor substantially justified. Plaintiffs are confronted new analyses whose underlying rationales and potential weaknesses they cannot explore without re-deposing Meldal. As the Court has pointed out, a key aim of the setting the discovery schedule it did in this case was to have all the evidence exchanged—notably, expert evidence—well in advance of the deadline for summary judgment motions. Nor does the Court see any reason Meldal could not have formulated and defendants disclosed these opinions within the deadline agreed to by the parties. The infringement issue was in the case at the time he submitted his original report, and there is no suggestion that he did not then have access to the materials on which he bases his new opinions.

The Court also declines to penalize plaintiffs for making a detailed rebuttal of Meldal's new non-infringement opinions in tandem with their request to strike. *Cf. Smithkline Beecham*, 2007 WL 1827208, at *3-4 (noting that plaintiff, "in [its] motion to

strike, attacked the conclusions made by [defendant's expert] on the merits suggesting that [it] was not caught off-guard or unable to respond due to the timing of the information"). The innocent party should not, by prudently making the alternative argument that the new expert opinions are wrong on the merits, put itself at risk of a resulting finding of harmlessness under Rule 37. The significant new portions of Meldal's declaration violate the Court's deadline for expert disclosures—a critical tool for efficient management of litigation, see *Serrano-Perez v. FMC Corp.*, 985 F.2d 625, 628 (1st Cir. 1993)—and appear to the Court to be part of a deliberate effort on defendants' part to revise and expand their non-infringement positions at the summary judgment phase. For these reasons, the discovery sanction under Rule 37(c)(1) is warranted.

2. Meldal on non-infringement of the '575 patent

In his October 2007 non-infringement report, Meldal opines with respect to the asserted claims of the '575 patent as follows:

- The requirement, in independent claims 1 and 15 of the '575 patent, of a processor "operative to store the digitized song data and the song identity data" means, Meldal opines, that the processor "must store the song data in an efficient manner." Meldal Resp. Expert Report ¶ 51. Defendants' products do not store data in this way. Meldal expressly adopts the "efficient storage" reasoning used in his opinion on the '189 patent: storage optimization is required by a predecessor Arachnid patent application, song size is the key to efficient storage, and defendants' products do not reflect a concern for this kind of storage optimization

because the cost of storage has fallen since the Arachnid patents were filed.

- The requirement, in independent claims 9 and 15, of a management station whose processor transmits song data and song identity data is not met by the defendants' products because "[o]ne computer does not perform both functions" in the Ecast system. *Id.* ¶ 60. Rather, "Ecast uses two separate mechanisms for distributing 'song data' . . . and 'song identity data.'" *Id.* ¶ 56. Meldal states that song data is transmitted through the Ecast system by large, dispersed server systems managed by outside contractors. Meldal's view is that plaintiffs' infringement expert, Dr. Dickinson, "incorrectly . . . lumps this vast system of servers together" by labeling it a unitary "management station." *Id.* ¶ 59.

In his declaration, Meldal states as follows with regard to the asserted claims of the '575 patent:

- Defendants' products do not optimize the storage of data they receive according to song size. See *id.* ¶ 6. The Court understands this opinion to bear on independent claims 1 and 15 of the '575 patent.
- Ecast-powered jukeboxes' song catalogs displays all licensed songs available on the Ecast network, irrespective of their storage location, and are not limited to the songs stored on a given jukebox. *Id.* ¶ 7. Meldal does not say which claims of the '575 patent this opinion affects; rather, he says only that "[t]he Ecast system is . . . fundamentally different than the inventions claimed" by both the '189 and the '575 patents in this

respect. The Court understands Meldal's opinion on this point to bear on independent claims 1 and 15.

- Ecast's song catalog does not incorporate the song size, song address, graphics address, or graphics size fields shown in figure 2 of the '575 patent.
- Ecast's catalog "is created independently of the songs present on any particular jukebox hard drive." *Id.* ¶ 9. In contrast, plaintiffs' jukeboxes "present the end-user with the library of songs stored locally on the jukebox memory, which is a subset of the available songs maintained in the 'master library.'" *Id.* ¶ 10. The Court understands Meldal to be referring to independent claims 1, 9, and 15, all of which disclose the transmission or receipt of "digitized song data and an associated song record." It is the association of song data and song record that Meldal says is not present in defendants' products.
- In the Ecast system, no single processor or computer retrieves and transmits song and song identity data to networked jukeboxes, as Meldal reads claim 15 of the '575 patent to require. Instead, "Ecast employs server farms at several locations using hundreds, or even thousands of processors" for these tasks. *Id.* 11.
- "Ecast does not create the 'song record' required by the claims of the '575 patent. The claims require a song record 'built' from the songs stored on the jukebox. Ecast does not create its catalog that way." *Id.* ¶ 12. That is, Meldal reads the '575 patent—he does not specify which claims, but

the Court assumes he means claims 9 and 15—to require a song record built from those songs present in the memory of a given jukebox.

- The displays used in Ecast-powered jukeboxes are "off-the-shelf" displays and are not "adapted for showing . . . user attract data." *Id.* ¶ 13. Again, Meldal does not say which of the asserted claims of the '575 patent would not be infringed under this opinion. The Court assumes that Meldal means independent claims 1 and 15, both of which call for "a display adapted for showing songs selections based on the song identity and a user-attract mode."
- The RAID (for redundant arrays of inexpensive disks) storage on which Ecast's servers store data are not "adapted for storing user attract data." RAID storage is "generic" and therefore suited for storing any kind of data, which is precisely why Ecast uses it: Ecast "makes a point of using standard technologies." *Id.* ¶ 14. Once again, Meldal does not specify which of the asserted claims would not be infringed under this opinion. This time, however, the Court cannot find corresponding claim language. Moreover, Meldal's opinion on this point has no counterpart in defendants' opposition brief. Nor is this paragraph of Meldal's declaration cited in the brief.
- The servers that make up Ecast's distribution system "use standard components and technologies, and are not 'adapted for transmitting user attract data.'" *Id.* ¶ 15. As before, Meldal does not say and the Court has been unable to determine what claim language, if any, corresponds to this

opinion. No related argument or citation to this paragraph of Meldal's declaration appears in defendants' opposition brief.

Comparing the two documents, the Court again determines that Meldal's opinion regarding song size in paragraph 6 of the declaration is sufficiently consonant with his opinion found in paragraphs 50-54 of his non-infringement report that it is not new. If anything, it is the same opinion as the one presented in Meldal's non-infringement report, minus the storage optimization element. Accordingly, the Court will not strike paragraph 6 of Meldal's declaration for purposes of plaintiffs' summary judgment motion on infringement of the '575 patent.

In addition, the Court determines that paragraph 11 of Meldal's declaration is sufficiently consonant with the opinion expressed in paragraphs 55-60 of his non-infringement report that it is not new. There is, to be sure, some difference between the two. In paragraph 11 of his declaration, Meldal says that the processor disclosed by the '575 patent should be construed to mean a single CPU, whereas the Ecast network draws on "server farms . . . using hundreds, or even thousands, of processors." In his non-infringement report, Meldal refers to this multitude of servers, but emphasizes that "[o]ne computer does not perform both functions"—i.e., transmitting song data and song identity data—in the Ecast system. Meldal Resp. Expert Report ¶ 60. This difference notwithstanding, Meldal's basic point in both statements is that the infrastructure by which data is transmitted to the networked jukeboxes in the parties' respective systems differs and that the multiple servers used by Ecast make a difference. Thus, the Court declines to strike paragraph 11.

The Court determines that all other paragraphs of Meldal's statement identified

above are new for Rule 26(a) purposes. For the reasons given above outlining the lack of substantial justification and prejudice to plaintiffs, these paragraphs are stricken.

Because the Court is striking most of Meldal's declaration, it will only consider those new positions to the extent that they have support elsewhere in the record.

C. Infringement of the '189 patent

The arguments over infringement of the '189 patent focus on claim 1, the only independent claim at issue in that patent. Claim 1 discloses

[a]n improved computer jukebox for playing songs selected by users of the computer jukebox from a library of songs that have been digitally compressed and stored in the computer jukebox, where the library of songs stored in the computer jukebox is capable of being updated upon the receipt of compressed digital song data, which represents at least one songs, and upon the receipt of song identity data, which represents the identity of each such song, the computer jukebox comprising:

- a communication interface for receiving the compressed digital song data and the song identity data;

- a data storage unit for storing the received compressed digital song data and the received song identity data for each of the songs stored;

- a display for showing, to prospective user [sic] of the computer jukebox, information identifying the songs for which digital song data is stored in the data storage unit and that is based on song identity data;

- selection keys responsive to a selection of a song to be played on the computer jukebox from the song identity information displayed on the display, the selection keys including a signal output representing activation of the selection keys;

- at least one audio speaker;

- a processor connected to a memory, the memory including a decompression algorithm for decompressing compressed digital song data;

- a digital to analog converted coupled between the processor and the audio speaker to convert digital song data to an analog signal coupled to the speaker; and

- wherein the memory further includes instructions for:

- causing the processor, in response to the signal output, to access and process compressed digital song data retrieved from the data storage unit so that the accessed compressed digital song data corresponds to the song selected by the selection keys;

- causing the processor to decompress the accessed

compressed digital song data and send the decompressed digital song data to the digital to audio converter so that the song selected is played on the computer jukebox as a result of the corresponding stored compressed song digital data being decompressed and converted by the processor and the digital to analog converter; and causing the processor to respond to compressed digital song data and to song identity data, which may be received by the communication interface of the computer jukebox, to control the storage of the received compressed digital song data and the received song identity data in the data storage unit to create an updated library of songs stored in the computer jukebox.

1. "to control the storage"

In support of their motion, plaintiffs point to their expert's claim charts, which reflect that the Ecast processor controls data storage, as required by the last sub-element of claim 1. Defendants counter that plaintiffs have not submitted evidence that the processors used in the Ecast system "respond to compressed digital song data and to song identity data" they receive "to control the storage" of that data, as that sub-element provides. In the Ecast system, defendants say, the processor simply stores this data in the jukeboxes' memory "incrementally as it is received," Def. Opp. Br. at 6, without any response beyond relaying the data and without controlling anything. The claim language must be read to require more than that, defendants contend. To support this, they point to language in the '189 patent's specification that shows how the processor controls storage based on the graphics size data of the files it receives.

Defendants' argument about the "control the storage" claim language fails to create a genuine factual dispute material to infringement. The issue defendants try to create rests on an asserted difference between a processor that actively controls storage according to song size and one that merely passes data on to be stored,

without imposing criteria for how storage will occur.⁴

The record does not support this position. Indeed, defendants' assertion that data is stored "incrementally as it is received," and therefore that its storage is not controlled by the processor, is somewhat misleading. In his deposition, which Ecast cites, Ecast's Darren Clark testified that "[t]he song is stored on the hard drive in increments as it is being downloaded. So it's not received and then stored, but rather stored as it is being received." Def. Resp. to Pl. Statement of Facts, Ex. 56 at 71:25-72:3. Clark was describing the process by which a single song file is downloaded to an Ecast-powered jukebox. To the extent that defendants' argument is meant to suggest that discrete, whole files—as opposed to parts of a single file—are merely stored "incrementally" in the order in which they are downloaded, it mischaracterizes Clark's testimony.⁵ Moreover, the fact that Ecast-powered jukeboxes may break up and store files in increments as they are downloaded does not necessarily mean the processor does not control the storage of these increments of data.

Finally, defendants seem to imply that claim 1 of the '189 patent requires that

⁴ The Court notes that a stricken portion of Meldal's declaration actually hurts defendants' position on this point. In paragraph 6 of the declaration, Meldal says that "[t]he Accused products flag the files within the directory by 'album' and 'artist name,' but do not control the storage using 'song size.'" Meldal Decl. ¶ 6. Defendants' own expert thus concedes that the artist and album fields play a role in storage—"flag[ging] the files within the directory" according to these attributes obviously relates to how they are stored—and thereby undermines defendants' argument. The album and artist fields are forms of song identity data, which in turn is one of two forms of data that the processor in claim 1 of the '189 patent uses to control storage. This suggests strongly that the processor in the Ecast system does control the storage of files by their artist and album attributes.

⁵ In their response to plaintiffs' Local Rule 56.1 statement, defendants are clearer that it is component parts of individual song files that are stored incrementally as they are received. Def. Resp. to Pl. Statement of Facts, ¶ 9 ("the song file is not received and stored, but stored as it is downloaded" in increments).

storage be controlled specifically—and perhaps exclusively—by song size. Specifically, they refer to language in the '189 patent's specification about how the processor may use graphics size data to control storage. Plaintiffs correctly point out that it is improper to import a claim limitation from the specification. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc). To the extent defendants suggest that claim 1 requires the processor to control data storage according to graphics size—Meldal in his declaration takes that view unequivocally, but the Court has stricken that portion of the declaration—their argument is rejected.

2. "display adapted for"

Plaintiffs again point to their expert's claim charts to show that this limitation of claim 1 is met: Ecast-powered jukeboxes include a touch-screen display that presents song selections to users and also displays user attract graphics. Defendants contend that summary judgment should be denied because the claim requires "a display adapted for showing . . . user attract data and information that identifies the songs" stored on the jukebox. Defendants' display, they contend, is an off-the-shelf unit and is not "adapted for" anything. "Adapted for," as it is typically used in claim language, denotes "a generic structure . . . modified in some way for a specific new use," defendants say, and has that limiting function in this case, based on the file history of the '189 patent. Def. Opp. Br. at 8. In reply, plaintiffs counter that the "adapted for" claim language refers to the instructions in the jukebox memory that tell the display what to show. That is, the instructions are what adapts the display to show the user attract data and information identifying songs, according to plaintiffs.

Defendants' reference to the file history of the '189 patent offers only limited

support for their position. The passage in the file history they cite does not bear on whether the claimed display is specially "adapted for" displaying user attract data and in fact does not use the words "adapted for" at all. Rather, the distinction drawn by the examiner was between the data displayed by the prior-art jukebox and that displayed by the jukebox disclosed in what became the '189 patent. The prior-art jukebox displayed only a static list of available songs, while plaintiffs' application claimed a display that was operative to show user-attract data as well as the list of available songs. Thus, although defendants' assertion that "to distinguish the prior art, defendants display had to be 'adapted for showing . . . user attract data" is technically accurate, the examiner did not mention the words "adapted for" in the September 17, 2001 notice of allowability.

On the other hand, plaintiffs point to no evidence that supports their position, which is that "the display is adapted for showing user attract data by the instructions in the memory." Pl. Reply at 4. That is, plaintiffs argue that the "adapted for" language refers to the instructions that cause the processor to, in turn, cause the display to show user attract data. This reading of claim 1 is unpersuasive. For one, the "display adapted for showing" language appears in a list of jukebox components (e.g., the communication interface, data storage unit, digital-to-analog converter, etc.). The language about instructions that ultimately cause the display to show user attract data, on the other hand, appears in a distinct list—specifically, the list of processor functions for which the memory contains instructions. No other jukebox component on the first list is described precisely as "adapted for" a task, yet several of these components are affected by the instructions that make up the second list. Thus, "adapted for" does not

appear to bridge the gap between the two lists. Moreover, the overarching difference between the two lists—one presents component parts of the jukebox (albeit with general functions sketched out), the other sets of instructions for specific tasks—supports the inference in defendants' favor that "adapted for" relates to the structure of the claimed display as a component of the jukebox, rather than how the claimed instructions affect it.

For these reasons, and drawing the appropriate inferences in the non-movant's favor, the Court determines that there is a genuine issue of material fact as to whether this element of claim 1 of the '189 patent reads on the Ecast-powered jukeboxes. Although this finding means that plaintiffs are not entitled to summary judgment on infringement of the '189 patent, the Court will explore the parties' arguments on the remaining claim limitations pursuant to Federal Rule of Civil Procedure 56(d)(1). See *Elantech Devices Corp. v. Synaptics, Inc.*, No. C 06-01839, 2008 WL 2008627, at *5 (N.D. Cal. Apr. 16, 2008).

3. Means-plus-function treatment of "instructions"

Plaintiffs again point to their expert's claim charts to argue that claim 1's requirement of "instructions" for causing the processor to perform storage functions is met: Ecast-powered jukeboxes' hard drives include software to operate the jukebox. Defendants respond that the Court should treat this as a means-plus-function element because "'instructions' is a generic term . . . that conveys no more structure to the software engineer than 'mechanism' does to the mechanical engineer." Def. Opp. Br. at 10. Accordingly, defendants say, the claim language covers only the structures named in the specification to perform those storage functions, plus equivalents, under 35

U.S.C. § 112, ¶ 6. Because the only such structure is song size and because Ecast-powered jukeboxes do not use song size data this way, they do not infringe, defendants conclude.

In reply, Plaintiffs argue that statutory means-plus-function treatment is not warranted because the presumption against such treatment where the word "means" is not used—as it is not here—holds. See *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002). "Instructions" as used in claim 1 is not a "generic structure word," Pl. Reply at 4, but rather is sufficiently definite because the claimed instructions are described as being located within a memory.

The issue, then, is whether the presumption against means-plus-function treatment is rebutted (defendants' view) or not (plaintiffs'). "[T]he presumption . . . against the application of § 112, ¶ 6 . . . can collapse when a limitation lacking the term 'means' nonetheless relies on functional terms rather than structure or material to describe performance of the claimed function." *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003) (citing *Micro Chem, Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250 (Fed. Cir. 1999)). Does the claim language on which these arguments focus "recite sufficiently definite structure" for performing the functions described? *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1353 (Fed. Cir. 2006) (quoting *CCS Fitness*, 288 F.3d at 1369). That is, does "the term itself connote sufficient structure to one of ordinary skill in the art to perform the functions identified by [the] limitation?" *Apex*, 325 F.3d at 1373.

Although they are the non-movants, defendants have the burden of showing, by

a preponderance of the evidence, that the presumption is rebutted. See *id.* at 1372 (citing *CCS Fitness*, 228 F.3d at 1369). The claim language at issue is as follows:

[A] computer jukebox comprising . . . a processor connected to a memory . . . wherein the memory further includes instructions for . . . causing the processor to respond to compressed digital song data and to song identity data [that the jukebox receives] to control the [data's] storage

The flaw in defendants' argument is that they attempt to isolate the term "instructions," as when they argue that "[s]tanding alone, 'instructions' conveys no more structure . . . than 'mechanism'" or other generic terms. Def. Opp. Br. at 10. The Court, however, cannot read terms in isolation; it must consider the limitations as a whole. See *Apex*, 325 F.3d at 1372, 1374 (citing *United States v. Tectronics, Inc.*, 857 F.2d 778, 781 (Fed. Cir. 1988)) (finding error in district court's "reliance on single words of the limitations . . . as opposed to the limitations as a whole" in its determination that the limitations at issue were means-plus-function limitations). Defendants assert that the rest of the claim fails to supply the needed structure, but they offer no reasoning to support this view.

The Court agrees with plaintiffs that the limitation's reference to the memory, which contains the instructions, conveys sufficient structure to keep the presumption against means-plus-function treatment in place. Plaintiffs point out that "memory" is a widely understood term for circuitry that allows for the storage and retrieval of information. The Court agrees that a person of ordinary skill in the relevant field would recognize sufficient structure, in the form of instructions located within a memory, to perform the recited functions.

The balance of defendants' argument on this point depends on their

assertion—which the Court rejects—that the requirement in claim 1 of "instructions" is a means-plus-function element. Because defendants fail to cross this threshold, the Court need not consider the rest of their argument, which is another attempt to suggest that data storage in plaintiffs' jukeboxes is determined by song size.

4. "library of songs"

Once again, plaintiffs point to their expert's claim charts to argue that claim 1's requirement of a "library of songs" is met: Ecast-powered jukeboxes play back users' song selections from song data stored on their hard drives. Defendants counter by pointing out that users of their jukeboxes select songs from a "'master library' of all songs available system wide," Def. Opp. Br. at 11, not from a library of songs stored on a given jukebox. The location of songs users may select, defendants say, is the "major difference" between their products and the inventions claimed in the '189 patent (as well as the '575 patent). *Id.* Plaintiffs reply that claim 1 of the '189 patent requires only that users are able to select for play songs stored locally on a jukebox. That defendants' jukeboxes also let users select songs that are stored centrally does not matter, plaintiffs say. Defendants' jukeboxes store some songs locally and make these songs available for play, which is all that claim 1 requires. Everything else is secondary: claim 1 "has nothing to do with whether a user can also select a song stored centrally." Pl. Reply at 5 (emphasis in original).

Implicit in plaintiffs' argument is the "fundamental" principle that "one cannot avoid infringement merely by adding elements if each element recited in the claims is found in the accused device." *Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1178 (Fed.

Cir. 1991) (quoting *A.B. Dick Co. v. Burroughs Corp.*, 713 F.2d 700, 703 (Fed. Cir. 1983)); see also *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999). In other words, if a patent claims a method or device comprising A and the accused method or device consists of A plus B, there is infringement, unless "the claim and specification in effect preclude any additional [elements] or require that the claim be limited to devices containing only the structures of the embodiments specifically described in the specification." *Stiftung*, 945 F.2d at 1178.

There are situations in which the claim language or the specification does, in fact, impose limits on the scope of the claim that make the general rule inapplicable. For example, in *Insituform Techs., Inc. v. Cat Contracting, Inc.*, 99 F.3d 1098 (Fed. Cir. 1996), the Federal Circuit construed the asserted claim of a patent directed to a method for repairing sewer pipes as being limited to "a process using only one vacuum cup which inherently creates a discontinuous vacuum." *Id.* at 1106. The accused process involved multiple vacuum cups and thus created a continuous vacuum. The court rejected the patentee's argument that "adding something to an infringement [i.e., more than one cup] does not avoid infringement." *Id.* (alteration in original). Rather,

while adding elements may, in certain instances, fail to prevent a finding of infringement, it will prevent a finding of literal infringement where, as here, the claim is specific as to the number of elements (one cup) and adding elements eliminates an inherent feature (discontinuous vacuum) of the claim.

Id. To limit the scope of a patent claim in this regard, the Federal Circuit requires evidence or the specification, of the patentee's "clear intent" to limit the scope of the claims. *Scanner Techs. Corp. v. ICOS Vision Sys., N.V.*, 365 F.3d 1299, 1304-05 (Fed. Cir. 2004).

Claim 1 of the '189 patent discloses, in pertinent part, a "computer jukebox for playing songs selected by users of the computer jukebox from a library of songs that have been digitally compressed and stored in the computer jukebox." The Court reads this language to concern the user's song selection options. It requires a computer jukebox that allows users to select for audio playback songs from a set of songs that are stored in a digitally compressed form the jukebox's memory. The Court sees nothing in the claim or the specification, however, that purports to limit the universe of user selection options to what is stored in the jukebox. Nor is selection exclusively from local storage an "inherent feature" of the claim language in the way that the discontinuous vacuum in *Insituform* logically entailed by the requirement of one and only one vacuum cup. *Insituform*, 99 F.3d at 1106. To the contrary, the possibility of selection from songs stored on a central server—the additional element—is not obviously precluded by the claim language or specification. See *Stiftung*, 945 F.2d at 1178.

For these reasons, the Court determines that plaintiffs are entitled to summary judgment on infringement of this claim element. Plaintiffs correctly observe that Ecast-powered jukeboxes allow for selection from a set of song files stored locally: Ecast's Spielman testified that a given Ecast-powered jukebox contains a "manifest . . . of the albums it is meant to hold and display locally . . . regardless of whether the network connection is up or down And that's why several hundred albums are stored on the hard drive." Pl. Statement of Facts, Ex. 9 at 74:14-19. Thus, a nontrivial number of song files—thousands, assuming the average album contains more than a handful of songs—are stored locally and displayed to users on a given jukebox's

"manifest." This is sufficient for infringement, notwithstanding the "major difference" between the two systems asserted by defendants.

5. "song identity data"

Plaintiffs again point to their expert's claim charts to argue that claim 1's requirement of "a data storage unit for storing . . . song identity data for each of the songs stored" is met: Ecast-powered jukeboxes store metadata for each downloaded compressed song on their hard drives. Defendants counter that this limitation of claim 1 is not infringed because a mismatch between the song and song-identity data stored on an Ecast-powered jukebox is possible at various times. This is because Ecast-powered jukeboxes only display to the user song identity data for songs to which it has "digital rights." Ecast may have had and lost these rights, prompting it to remove the corresponding identity data from its catalog—but not necessarily to remove the underlying song file from its network, according to defendants. Alternatively, Ecast may obtain the underlying file and place it on a jukebox before it has the right to make it available for user play, defendants suggest.

This last point matters. Plaintiffs' only argument in reply is that although a mismatch is possible when Ecast loses the rights to a song, that song and corresponding song identity data were both downloaded to Ecast-powered jukeboxes and stored there, such that "[t]he requirements of the claims have already been met." Pl. Reply at 5. But defendants argue that an antecedent mismatch—one occurring not after rights are lost but rather before they are obtained—is possible. That is, "Ecast's products are . . . designed to store unlicensed songs on the jukebox without a corresponding entry in the catalog." Def. Opp. Br. at 11. Spielman's testimony on this

point appears to suggest such an antecedent mismatch is possible: "it's a very complex set of rights that need to be acquired . . . for [Ecast] to be legally able to put a piece of music on our network. And so as a result, we will often acquire music in advance of our legal right to distribute it." Pl. Statement of Facts, Ex. 9 at 78:22-79:1.

A closer look, however, shows that the record does not support defendants' contention that this music is stored on the jukeboxes, as opposed to Ecast's central servers, before Ecast obtains the rights to it. Indeed, it points the opposite way. Spielman says Ecast has "more music in our database than we make available to our jukeboxes," *id.* at 78:14-15, and refers to "content files that someone administratively [i.e., legally] has decided belongs on the juke," *id.* at 84:17-19. Plaintiffs' contention that Ecast-powered jukeboxes "are designed to store unlicensed songs" may be technically accurate, but the record indicates that in practice Ecast does not allow song files to be downloaded to jukeboxes until it has the right to do so, at which point its updated catalog of song identity data corresponding to this "legal music," *id.* at 82:2, is also made available to the jukeboxes.

Accordingly, the Court determines that there is no genuine issue of material fact as to infringement of this claim limitation.

D. Infringement of claims the '575 patent

The parties' arguments concerning the '575 patent focus on the four independent claims in that patent, claims 1, 9, 15, and 21.

1. "display presenting song selections based on the song identity data"

As with the '189 patent, plaintiffs rely on their expert's claim charts to show that

each limitation of the asserted claims of the '575 patent is met by Ecast-powered jukeboxes. Defendants counter that their jukeboxes do not infringe independent claims 1, 15, and 22 of the '575 patent, which require "a display presenting song selections based on the song identity data" stored on the jukebox, because this claim language covers only song identity data that corresponds to songs also stored in the jukebox. Because Ecast-powered jukeboxes present users with a system-wide catalog that includes identity data for songs not stored locally on a given jukebox, defendants say, what users see at the song selection step differs fundamentally between the two jukebox systems, and there is no infringement. Plaintiffs reply that this "distinction is not in the claims" and that all that is required for infringement is "that song selections presented at the jukebox are based on the stored song identity data," a requirement met by Ecast-powered jukeboxes. Pl. Reply at 6.

The Court agrees with plaintiffs that the asserted claims require only that locally stored song identity data is the basis for the song selection options the jukebox user sees. Whether the corresponding song data for a given selection displayed to the user is stored locally or centrally has no bearing on this point. Thus, the Court determines that no genuine issue of material fact exists as to defendants' infringement of this limitation of the asserted claims.

2. Components "adapted for" the recited uses

As noted, plaintiffs rely on their expert's claim charts to show that each limitation of the asserted claims of the '575 patent is met by Ecast-powered jukeboxes. Defendants argue that Ecast-powered jukeboxes lack components "adapted for" certain functions, again because defendants use "off-the-shelf" components. Specifically,

defendants argue that their products do not include the display disclosed by claims 1 and 15 or the communication interface required by claims 9 and 15. Defendants also argue that because the "adapted for" language was added to modify the components in each of these claims part-way through prosecution of the '575 patent, they must have played some significant role in advancing its issuance.

The record evidence on which defendants rely to support their arguments is problematic. Their argument relies in part on portions of Meldal's declaration that the Court has stricken. Moreover, with regard to the display, for example, defendants point to a spreadsheet captioned "NSM Digital Jukebox Specification" that includes only two sentences that have to do with a display: "The system shall incorporate a 17" touchscreen standard with an option for a lower cost 15" version" and "The touchscreen shall be ELO touch Surfact Acc Wave." Def. Resp. Statement of Facts, Ex. 58 at E033035. These sentences do not suggest that the display is specially adapted for showing user-attract data. That is hardly persuasive, however, because they say almost nothing about what might be displayed or how the display might work. Rather, they relate to the display's size and touchscreen attribute. The first sentence appears to indicate only that the default is that the system will incorporate a seventeen-inch touchscreen, with an option for a smaller screen. Defendants do not attempt to explain what the second sentence means.

A second document defendants cite, which similarly sets out technical specifications for the display, does not help. This document specifies the display's screen resolution and the touchscreen controller with which the Ecast software will work. See Def. Resp. Statement of Facts, Ex. 59 at E020996. It gives no clue about

whether the display itself might be specially adapted to show certain data.

Plaintiffs, however, do nothing to rebut significant inferences that, on plaintiffs' motion for summary judgment, the Court must make in defendants' favor. First, as before, plaintiffs point to no evidence "the display is adapted for showing user attract data by the instructions in the memory." Pl. Reply at 6. The Court may infer, in defendants' favor, that the structure of the claimed display is somehow adapted specially to display the song identity data. Second, the Court rejects plaintiffs' argument that "adapted for" as it is used with the other two components is not limiting unless the specific facts of the case so dictate, per section 2111.04 of the Manual of Patent Examining Procedure, and that because defendants point to no such facts, plaintiffs are entitled to summary judgment. As the moving parties, plaintiffs bear the burden of establishing that there is no genuine issue of material fact. They cannot shift this burden to defendants. Moreover, because plaintiffs do not try to explain the insertion of "adapted for" into the claim language in September 2001, the Court can draw the inference that this phrase has a limiting function.

For these reasons, the Court determines that genuine issues of material fact exist as to whether these claim elements read on defendants' products.

3. "central management system processor"

In response to plaintiffs' expert's claim charts showing how each element of the asserted claims is present in Ecast-powered jukeboxes, defendants next argue that Ecast-powered jukeboxes cannot contain the "central management system" required by claims 9 and 15 of the '575 patent because the patented system's processor must be understood as a single unit operative to perform several tasks (retrieval and

transmission of song data, retrieval and transmission of song identity data, building of an "associated song record," and transmission of this record to the jukebox).

Defendants say that there can be no infringement of this claim element because "in the Ecast products, no single processor . . . performs each of [these] tasks . . . rather Ecast uses server farms at several locations using hundreds (or even thousands) of processors." Def. Opp. Br. at 15.

Defendants' argument is essentially a reprise—though a rather poorly worded one—of the opinion espoused by Dr. Meldal in his October 2007 non-infringement report.⁶ There, Meldal opines that the "management station" claim element is not met because "Ecast uses two separate mechanisms for distributing 'song data' . . . and 'song identity data.'" Meldal Resp. Expert Report ¶ 56. Meldal explains that when a song file is stored on one of the Akamai servers used by Ecast to store and transmit song data, "[o]ne computer does not perform both functions," *id.* ¶ 60, i.e., transmission of both song data and song identity data, because the Akamai servers do not contain song identity data—only the servers housed at a Qwest server facility in Sunnyvale, California where Ecast leases space store and transmit this data.

Plaintiffs are correct that the Federal Circuit "has repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.'" *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342-43 (Fed. Cir. 2008) (quoting *KCJ Corp.*

⁶ The Court notes that it declined to strike paragraph 11 of Meldal's declaration submitted in opposition to plaintiffs' summary judgment motion because it is essentially consonant with this earlier opinion.

v. Kinetic Concepts, Inc., 223 F.3d 1351, 1356 (Fed. Cir. 2000) (internal quotation marks and alterations omitted)). But the question is not so simple. Obviously, each system employs more than one processor. The question is whether the asserted claims require each processor to perform all of the functions described, or whether there can be some division of labor (de facto or otherwise), for example between transmission of song data and transmission of song identity data.

The Court concludes that there is nothing in the claim language that requires any given processor to perform all of the listed functions. To the contrary, the claims do not preclude a division of labor among processors. Processors that are part of the Ecast system—though they may be housed in a Qwest facility or operated by Akamai, this does not matter⁷—perform the various functions listed. Allowing defendants to avoid infringement through fairly elementary specialization of these processor functions would improperly narrow this element of the asserted claims.

4. "build an associated song record"

Claims 9 and 15 require that the central management system processor be "operative to retrieve song identity data associated with the selected digitized song data, build an associated song record using the song identity data, and transmit the

⁷ To the extent defendants argue that they do not infringe this element of the asserted claims because Akamai or Qwest and not Ecast performs the key functions, the Court rejects the argument. The reason is one given in the Court's rationale for rejecting defendants' argument that direct infringement is impossible because no one of them makes, uses, or sells "a complete jukebox system." Def. Opp. Br. at 4. It is that a defendant "cannot avoid infringement . . . simply by contracting out the steps of a patented process to another entity." *BMC Resources*, 498 F.3d at 1381. Qwest, which operates "server farms" in which Ecast leases space, and Akamai, which operates a diffuse server network, are who provide a service to Ecast. With regard to Akamai, for example, Spielman testified that "they're an extension of our own data center services, since we've accepted them as a partner. So they're virtually one of our data centers." Pl. Statement of Material Facts, Ex. 9 at 197:17-19.

associated song record to the computer jukebox.” There is no question that the Ecast system processor builds song records using song identity data. Defendants argue, however, that because Ecast’s catalog is based on all songs that are available system-wide, the processor does not “build” a song record using “song identity data associated with the selected digitized song data.” This appears to be another variation of defendants’ argument that the catalog displayed on Ecast-powered jukeboxes has no necessary correlation to the songs stored on any given jukebox, but rather reflects the songs that are available system-wide.

The Court agrees with plaintiffs, however, that the claim language requires that a song record be built for songs that are transmitted by the central processor. In essence, the claim limitation essentially requires that when a user selects a song, the song record associated with that song is transmitted to the jukebox the user is operating. There is no genuine dispute that this occurs in the Ecast system.

5. “storing” step

Claim 22 of the '575 patent discloses

[a] method for receiving and playing songs using a computer jukebox, the method comprising:

receiving at the computer jukebox digitized song data and an associated song record, the song record including song identity data comprising at least one of a song title, a song category, song address, song size, graphics address, graphics size, and play count;

storing the digitized song data and the song identity data in a memory in the computer jukebox;

presenting song selections based on the song identity data on a display;

determining from the song selections a selected digitized song to be played on the computer jukebox based on input from a song selector;

retrieving digitized song data corresponding to the selected digitized song;
converting the digitized song data to an analog signal; and
applying the analog signal to an audio speaker.

Plaintiffs again rely on their expert's claim charts to show that claim 22's requirement of "storing the digitized song data and the song identity data in a memory in the computer jukebox" is met by Ecast-powered jukeboxes: the downloaded songs and metadata are stored on the accused devices' hard drives, and nothing more is required. Defendants respond that this claim element should be given step-plus-function treatment under 35 U.S.C. § 112, ¶ 6 because it does not describe how this storing is accomplished. This is a second attempt by defendants to make song size the determinant of storage in the claimed inventions. Step-plus-function treatment would mean the claim language covers only the acts named in the specification to perform those functions (plus their equivalents). Defendants say that this means storage according to song size because this is what the specification describes. Because Ecast-powered jukeboxes do not use song size data this way, defendants argue, they do not infringe.

As with defendants' argument for treating the claimed storage instructions in claim 1 of the '189 patent as a means-plus-function element, this attempt to invoke 35 U.S.C. § 112, ¶ 6, and so to limit the claim's reach to those acts set out in the specification, fails. This paragraph of the patent statute "is implicated only when means plus function without definite structure are present, and that is similarly true with respect to steps, that the paragraph is implicated only when steps plus function without acts are present." *O.I. Corp. v. Tekmar Co., Inc.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997). Just as

there are presumptions for and against means-plus-function treatment of claim elements, so there are presumptions for and against step-plus-function treatment under § 112, ¶ 6—save that "identifying step-plus-function claims is inherently more problematic" because it is harder to distinguish acts from functions than it is to tell means and functions apart. *Seal-Flex, Inc. v. Athletic Track and Court Constr.*, 172 F.3d 836, 848-49 (Fed. Cir. 1999) (Rader, J., concurring). Thus, "a claim drafter must use language that expressly signals the recitation of a function as distinguished from an act," such as "step for," to set up a presumption that section 112, paragraph 6 applies. *Id.* at 849. Otherwise, the opposite presumption applies—and holds, unless the claim element "merely claim[s] the underlying function with recitation of acts for performing that function." *Id.*; see also *O.I. Corp.*, 115 F.3d at 1583.

There is no "step for" language in the claim, and thus the presumption is against application of 35 U.S.C. § 112, ¶ 6. Step-plus-function treatment is not warranted unless "storing the digitized song data and the song identity data in a memory" claims an underlying function without any corresponding act. The Court determines that a person with ordinary skill in the relevant field would find present in the claim language an act—namely, placement of data for storage and later retrieval in circuitry comprising a memory. "Storing . . . in a memory" conveys both what this claim limitation accomplishes in relation to the other limitations, and how this function is accomplished. *Cf. Masco Corp. v. United States*, 303 F.3d 1316, 1328 (Fed. Cir. 2002) (rejecting district court's application of 35 U.S.C. § 112, ¶ 6 on the ground that "'transmitting' in the sense of causing a force to be conveyed through a medium by mechanical parts is an act, since it describes how the function of the 'transmitting a force' limitation is

accomplished").

As before, the balance of defendants' argument depends on their assertion that "storing . . . in a memory" is a step-plus-function element. Because the Court rejects this premise, it need not consider the rest of defendants' argument.

6. "Receiving at the computer jukebox digitized song data and an associated song record"

Finally, plaintiffs point to their expert's claim charts to show that claim 22's requirement of "receiving at the computer jukebox song data and an associated song record" is met by Ecast-powered jukeboxes because they download both songs and song identity data (the claim's "song record") associated with the songs. Defendants argue that in the Ecast system, "[t]he song data is . . . retrieved independent of the song catalog, and the two are not 'associated.'" Def. Opp. Br. at 17. The Court agrees with plaintiffs, however, that the claim does not require that the song and the song record associated with it be received at the same time. It is undisputed that the Ecast jukeboxes receive both; the fact that they do not receive them at the same time does not make them any less "associated."

E. Inequitable conduct

Plaintiffs also move for summary judgment on defendants' counterclaims that the Arachnid patents are unenforceable for inequitable conduct during prosecution. As an initial matter, of the nine inequitable conduct arguments plaintiffs anticipated in their summary judgment brief (based on various filings by defendants), defendants pursue only three in their opposition brief. In their reply, plaintiffs characterize the other six as "abandoned allegations." Defendants do make a generic, desultory argument that

these remaining allegations provide a basis for the Court to "fairly infer intent [to deceive the PTO] from a pattern of purported oversights or omissions." Def. Opp. Br. at 30. Without more in the way of elaboration, this argument goes nowhere. The Court agrees with plaintiffs that the remaining inequitable conduct allegations are forfeited. *See Scott-Riley v. Mullins Food Prods., Inc.*, 391 F. Supp. 2d 707, 718 (N.D. Ill. 2005) (citing *Laborers' Int'l Union of N. Am. v. Caruso*, 197 F.3d 1195, 1197 (7th Cir. 1999)) (arguments not raised in opposition brief on summary judgment motion are deemed forfeited); *see also Blakely v. Brach & Brock Confections*, 181 F. Supp. 2d 943, 951 (N.D. Ill. 2002) (citing *Arendt v. Vetta Sports, Inc.*, 99 F.3d 231, 237 (7th Cir. 1996)) (same). Defendants have chosen their arguments.

1. Alleged misrepresentation of the '400 application's rejection

Defendants argue that Arachnid made material misrepresentations to PTO examiners during prosecution of the '189 and '575 patents by "concealing the basis of a rejection [of] the related '400 application." Def. Opp. at 18. Specifically, defendants claim that Arachnid's senior prosecuting attorney on the three applications (Held) deliberately mischaracterized a rejection made by the examiner of the '400 application (Sough) in an Arachnid submission to the examiner of the other two applications (Hewitt).

The facts relating to this issue are somewhat complex. The Court follows defendants' lead in setting them up chronologically.

- February 8, 2001: Hewitt, the examiner of the '849 and '875 applications (later to issue as the '189 and '575 patents), rejects the '875 application

on double-patenting grounds. This is a less serious form of rejection that can be remedied by filing what is known as a terminal disclaimer.

- April 25, 2001: Sough rejects the '400 application on obviousness grounds—that is, Sough determines that combinations of the prior art rendered the claimed invention obvious and therefore unpatentable under 35 U.S.C. § 103(a). This is a more serious form of rejection that cannot be remedied with a terminal disclaimer.
- April 25, 2001: Hewitt rejects the '849 application on double-patenting grounds.
- June 21, 2001: Held faxes two letters to Hewitt, although one is addressed to Sough and concerns the '400 application. Terminal disclaimers are attached to both letters. The text of both letters asks whether "filing the Terminal Disclaimer obviates the need to further respond to the April 25, 2001 Office Action."
- August 21, 2001: Held responds to Sough's obviousness rejection of the '400 application by narrowing the claims—apparently, the appropriate response to this kind of merits rejection.
- November 8, 2001: Sough again rejects the (narrowed) '400 application, in part on double-patenting grounds and also on obviousness grounds.
- February 5, 2002: Held responds to Sough's rejection, and specifically to the double-patenting aspect of it, by pointing out that "a terminal disclaimer . . . was filed on June 21, 2001."

Defendants claim that Held engaged in inequitable conduct when he faxed

Hewitt the letter addressed to Sough, accompanied by a terminal disclaimer, asking whether this "obviate[d] the need to further respond to the April 25, 2001 Office Action"—itself somewhat ambiguous because Sough and Hewitt each issued rejections on that date, of different applications and for different reasons. Defendants say Held did not disclose the true nature of the '400 application's rejection in this fax to Hewitt; worse, he deliberately disguised it as a less serious kind of rejection. Defendants argue that the requisite intent to deceive can be inferred from plaintiffs' failure to offer an innocent excuse for the fax and that the materiality of this misrepresentation is established by the significant overlap in the subject matter of the three applications.

Plaintiffs' arguments aim largely at what they say is defendants' failure to establish the intent element of inequitable conduct. Defendants, they say, have no direct evidence of intent to mislead the PTO because they failed to ask Held pointed questions about his correspondence with Hewitt at the attorney's deposition. Plaintiffs also say that there is no evidence to ground an inference of intent to mislead; rather, the evidence of record points to an innocent explanation of what defendants say was Held's mischaracterization of Sough's rejection.

As defendants point out, the intent element of inequitable conduct "is typically proved inferentially" and not on the basis of "confession[s] from the stand by the inventor or the prosecuting attorney." *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354, 1371 (Fed. Cir. 2003) (citing *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed. Cir. 1995)). Thus, deposition testimony by Arachnid's attorney on this point is not strictly required. Rather, "the involved conduct, viewed in light of all the evidence, including evidence indicative of good faith, must indicate sufficient culpability to require

a finding of intent to deceive." *Paragon Podiatry Lab., Inc. v. KLM Labs., Inc.*, 984 F.2d 1182, 1189 (Fed. Cir. 1993) (quoting *Kingsdown Medical Consultants Ltd. v. Hollister, Inc.*, 863 F.2d 867, 876 (Fed. Cir. 1988)). Correspondingly, on a patentee's motion for summary judgment on an inequitable conduct defense, the Court must be able to conclude, after drawing all reasonable factual inferences in the defendant's favor, that no reasonable jury could find clear and convincing evidence of intent to deceive. See, e.g., *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 547 (Fed. Cir. 1998) (affirming summary judgment of no inequitable conduct).

Plaintiffs argue that there is an innocent explanation for Held's "obviates" comment in his fax to Hewitt.⁸ In essence, it is this: Sough ultimately rejected the '400 application, in an office action dated November 2001, on both obviousness and obviousness-type double patenting grounds. (Again, a rejection on the latter ground, but not the former, can be obviated by a terminal disclaimer.) The double-patenting aspect of Sough's final rejection invoked U.S. Patent No. 5,355,302. In February 2002, Held responded to that office action by noting that Arachnid had filed a terminal disclaimer with respect to the '302 patent in June 2001—on the same date that Held filed with Hewitt the terminal disclaimer and letter addressed to Sough. Thus, plaintiffs

⁸ Plaintiffs assert that putting forward such an explanation is "unnecessary for this motion," Pl. Reply at 9 n.14, and that they "have no such burden" because defendants' arguments "are insufficient to carry their burden of proffering clear and convincing evidence of intent." *Id.* at 9-10. But plaintiffs forget that they have moved for summary judgment of no inequitable conduct. Thus, it is plaintiffs' burden to show that the evidence relating to alleged inequitable conduct "is such that the non-movant can not prevail." *ATD Corp.*, 159 F.3d at 547. Because defendants, in attempting to resist summary judgment, point to Held's communications with Hewitt as grounds for an inference of intent to deceive, plaintiffs are obligated to respond—assuming they wish to prevail on their motion for summary disposition of this issue.

say, "at least as far as Arachnid's attorneys were aware, the terminal disclaimer sent to Hewitt on June 21, 2001 had been filed in the '400 application." PI. Reply at 9 n.14; see *a/so* PI. Resp. to Def. Statement of Facts 25. That is, plaintiffs imply that the "obviates" letter addressed to Sough was filed with Hewitt by mistake.

This explanation is insufficient to entitle plaintiffs to summary judgment on the question of inequitable conduct. Sough did finally reject the '400 application on both double-patenting grounds and obviousness grounds in November 2001. But the only rejection of the '400 application on file in June 2001, when Held submitted to Hewitt the letter addressed to Sough and the accompanying terminal declaration, had been on obviousness grounds alone. The record reflects that Arachnid's prosecuting attorneys responded accordingly, narrowing the claims in an August 2001 submission in an attempt to avoid a final rejection under 35 U.S.C. § 103(a). Plaintiffs do not explain how a terminal disclaimer of the '302 patent was called for in June 2001 in the '400 application file when the examiner did not raise a double-patenting problem with respect to this patent until five months later. Thus, plaintiffs' argument that "as far as Arachnid's attorneys were aware, the terminal disclaimer sent to Hewitt on June 21, 2001 had been filed in the '400 application," PI. Reply at 9 n.14, does not carry the day for summary judgment purposes.

For the materiality element, defendants assert that "[t]he claims of all three applications involved the downloading and playing of digitized songs on a computer jukebox." Def. Opp. Br. at 23. Because of this overlap in subject matter, they say, Hewitt would have considered Sough's rejection of the '400 application on obviousness grounds material to his examination of the other two. Indeed, defendants argue that the

same prior art Sough cited in April 2001 as rendering the '400 application obvious "would have rendered the pending claims of the '849 and '875 applications obvious." *Id.* at 24. Defendants further argue that Held's statement to Hewitt was an affirmative misrepresentation and that such misrepresentations are more likely to be considered material than merely misleading omissions. *Id.* at 23.

The Court agrees that a genuine issue of material fact exists as to the materiality of Held's communication with Hewitt, based on the overlap in subject matter of the three applications and the possibility that the communication might have obscured the nature of Sough's initial rejection on obviousness grounds. Notwithstanding plaintiffs' insistence that "Defendants do not proffer any evidence to show that the claims are, in fact, similar," Pl. Reply at 10, the claims made in the three applications, as cited by defendants, overlap enough to support an inference of materiality by a reasonable jury. For example, the '400 application claimed "a computer jukebox . . . comprising a communication interface for receiving digital data from an external source [and] a programmable computer memory comprising instructions for storing the digital data." Def. Resp. to Pl. Statement of Facts, Ex. 44 at ARACH 021107. The '849 application similarly claimed "a computer jukebox comprising a communication interface for receiving the compressed digital song data and the song identity data [and] a data storage unit." *Id.*, Ex. 45 at 3. Likewise, the '875 application claimed "a computer jukebox for playing songs transferred to and stored in the jukebox, the computer jukebox comprising at least one communication interface for receiving digitized song data . . . [and] a memory storing the digitized song data . . ." *Id.*, Ex. 46 at 2. The evidence points to at least a general similarity in the claims made by the three

applications.

Moreover, Examiner Sough's April 2001 rejection of certain claims of the '400 application on obviousness grounds referenced prior art that arguably bears on the claims at issue in this case. Specifically, Tsumura, one prior art reference analyzed by Sough, "discloses steps of downloading digitized songs/data from an external source . . . and storing the digitized songs/data in a memory . . . in the computer jukebox." *Id.*, Ex. 65 at 5. Sough went on to note that McConnell, another piece of prior art,

does not explicitly disclose that his computer jukebox is capable of receiving and storing digital data and a communication interface for receiving digital data from an external source. However, Tsumura discloses an electronic amusement device capable of receiving and storing digital data and a communication interface for receiving digital data from an external source . . .

Id. at 7.

In sum, because genuine issues of material fact exist with respect to both Held's intent and the materiality of the information that his communication with Hewitt arguably obscured, plaintiffs are not entitled to summary judgment on this aspect of defendants' inequitable conduct defense. As before, although this finding means that plaintiffs are not entitled to summary judgment on inequitable conduct, the Court will explore the remaining aspects of the inequitable conduct defense pursuant to Federal Rule of Civil Procedure 56(d)(1).

2. Inventorship

Defendants also argue that Arachnid engaged in inequitable conduct with regard to inventorship of the Arachnid patents. Defendants make two separate points: first, one of the named inventors on the Arachnid patents, Samuel Zammuto, testified in his deposition in another lawsuit that he had no role in developing the inventions claimed

by the Arachnid patents and did not know why he was listed as an inventor; and second, plaintiffs failed to name as an inventor an attorney who, according to Tillery's deposition testimony in the same lawsuit, may have provided a storage algorithm that allowed Arachnid to distinguish what eventually issued as the '302 patent from a prior art reference.

The Court addressed these subjects in a prior ruling in this case, albeit in a different procedural context. In its March 2007 ruling denying defendants' motion to compel correspondence between Arachnid and its lawyers under the crime-fraud exception to the attorney-client privilege, the Court noted that "it is possible that Arachnid's apparent failure to disclose the true inventors amounts to inequitable conduct" but specifically declined to address this possibility because inequitable conduct does not trigger the crime-fraud exception. *Rowe*, 241 F.R.D. at 303 (citing *In re Spalding Sports Worldwide, Inc.*, 203 F.3d 800, 807 (Fed. Cir. 2000)). The issue is now squarely before the Court as a result of plaintiffs' motion for summary judgment.

With regard to the inclusion of Zammuto as a named inventor, plaintiffs argue that there is no evidentiary basis for an inference of deceptive intent because Zammuto, as an Arachnid employee, was legally obligated to assign his inventions to the company. Thus, plaintiffs argue, he stood to gain nothing from claiming inventorship and could not have had a motive to deceive. Defendants counter that intent can be inferred from Zammuto's filing of oaths "which he knew would deceive the PTO." Def. Opp. Br. at 26. They respond to plaintiffs' motive argument by insisting that motive should not be conflated with intent and that the former is irrelevant.

The Federal Circuit recently stated that "[a]n inventor's motives in applying for a

patent or his views on the purposes of the patent system are generally irrelevant to a proper determination of inequitable conduct." See *Research Corp. Techs., Inc. v. Microsoft Corp.*, ___ F.3d ___, 2008 WL 2939524, at *5 (Fed. Cir. Aug. 1, 2008). That statement, however, cannot be properly understood outside of the context in which it was made. In context, what the court intended to communicate is that the desire for financial gain, which most if not all patent applicants seek by applying for a patent, is not probative of the intent required for inequitable conduct. That aside, however, evidence of motive – or, as in this case, the absence of motive – is often highly probative of intent. Indeed, the Federal Circuit has expressly recognized the role of motive evidence in the determination of inequitable conduct. See *Ferring B.V. v. Barr Labs., Inc.*, 437 F.3d 1181, 1186 (Fed. Cir. 2006); see also, e.g., *LNP Eng'g Plastics, Inc. v. Miller Waste Mills, Inc.*, 275 F.3d 1347, 1361 (Fed. Cir. 2001) (giving deference to trial court's determination regarding inequitable conduct because of the role of "witness credibility and motive issues" in that determination).

Although the apparent absence of a motive on the part of Zammuto to intentionally deceive the PTO is relevant, the Court notes that the Federal Circuit has "urge[d] caution in the grant of summary judgment respecting a defense of inequitable conduct." *Judkins v. HT Window Fashion Corp.*, 529 F.3d 1334, 1343 (Fed. Cir. 2008) (quoting *Paragon*, 984 F.2d at 1188-89). The record at present simply contains too little evidence of the "facts and circumstances surrounding [Zammuto's] overall conduct," *Paragon*, 984 F.2d at 1190, for the Court to determine as a matter of law that he lacked the intent to deceive.

Defendants also argue that there was inequitable conduct in Arachnid's failure to name James Bennett, an attorney with the firm that represented Arachnid in the prosecution of the patents-in-suit, as an inventor. This claim arises from testimony by one of the named Arachnid inventors, Michael Tillery, in a prior lawsuit regarding certain features of the '302 patent. Tillery testified that information regarding song storage, found in figure 2 of the application that later issued as the '302 patent, came from Arachnid's attorneys, who told the inventors this information "was the only way we would receive the patent" given prior art that had been cited by the examiner. Def. Resp. to Pl. Statement of Facts, Ex. 48 at 75. Tillery recalled conversations, arranged through Arachnid's attorneys, with someone who "knew more about computers than [he] did" and that this person was the source of the information in figure 2 that was apparently critical to the '302 patent's eventual issuance. *Id.* Tillery confirmed explicitly that neither he nor either of the other named inventors, nor anyone else at Arachnid, was the source of this information.

Tillery did not remember the name of the person with whom he spoke and who was the source of the information in figure 2. After the Court ruled in March 2007 that Arachnid had waived the attorney-client privilege regarding Tillery and the other named inventors' communications with the company's attorneys about the development of figure 2 and certain related matters, see *Rowe*, 241 F.R.D. at 301-02, Bennett's name surfaced.

Defendants now argue that the evidence supports an inference of inequitable conduct from Arachnid's failure to name Bennett as an inventor. Specifically, they argue that Arachnid had a motive to hide Bennett's role: if Bennett were to be named

an inventor of the '302 patent, then by operation of sections 103(c) and 102 of the patent statute, the '302 patent would become prior art in relation to the other Arachnid patents because of the lack of common ownership (on this theory, Bennett's putative inventor role and lack of obligation to assign to Arachnid would make the '302 patent's ownership vary from that of the other Arachnid patents).

Plaintiffs counter that because Bennett has not come forward to claim inventorship—at least, there is no evidence in the record that he has—the "missing inventor" theory cannot be the basis for a finding of inequitable conduct. They also argue that the "ambiguous" deposition testimony of Tillery and the other named inventors about the unnamed individual (presumably Bennett) does not bear on whether the Arachnid inventors or their lawyers intended to deceive the PTO; indeed, plaintiffs say "the death knell of this issue" lies in Arachnid's submission of the Tillery and Martin depositions to the patent examiners, "who had an obligation to raise inventorship, if they believed there was an issue." Pl. Reply at 13. Plaintiffs also reject the "common ownership" argument, saying that the '302 patent could not be prior art in relation to the other two Arachnid patents that concern music downloading under 35 U.S.C. § 103(c) because these patents are "straight continuations" of the '302 patent. (The application that resulted in the other Arachnid patents, which concern advertising, expressly identified the '302 patent as prior art.)

The Court agrees that defendants' strained common ownership theory, under which Arachnid would have had a motive to conceal Bennett's inventorship to preserve its other patents, lacks factual support. As plaintiffs point out, any intentional omission of Bennett as an inventor would have taken place in 1992. The motivation for

inequitable conduct to which defendants point—namely, the risk that the '302 patent would become invalidating prior art to the other Arachnid patents because of a lack of common ownership, with Bennett's role the odd variable out—appears to be illusory, because the applications for the other patents were not in the picture then. There is no basis to infer inequitable conduct from the hypothetical possibility that "sometime in the future there might be a later patent of which Bennett did not share ownership." Pl. Reply at 13. Because this is defendants' only affirmative argument for why the evidence in the case could support an inference of intent to deceive the PTO, plaintiffs are entitled to summary judgment on this aspect of the inequitable conduct claim.

F. Invalidity of the '350 patent

Finally, plaintiffs move for summary judgment on the invalidity of the asserted claims of the '350 patent (claims 17, 19, 20, and 21), which is the subject of Ecast's infringement counterclaim. Plaintiffs note first that defendants failed to submit an expert report in response to the September 2007 report of their expert, Dr. Bradley Dickinson, in which Dickinson opines that the asserted claims of the '350 patent are both anticipated by prior art and obvious. Plaintiffs are wrong, however, when they say that this silence on defendants' part entitles them to summary judgment because "the facts . . . are undisputed." Pl. Br. at 33. Defendants contest plaintiffs' positions in their response to plaintiffs' Local Rule 56.1 statement and with attorney argument. The Court will not enter summary judgment on the basis of defendants' failure to file a responsive expert report without more.

The parties also clash over identifying the proper prior art references for the analysis of obviousness. Defendants say that the '981 application cannot be prior art to

the '350 patent because it does not fit within any of the statutory categories under 35 U.S.C. § 102. Plaintiffs appear to concede this point by asserting that the '302 patent is in fact proper prior art "through the '981 application." Pl. Reply to Def. Add'l Facts 31. The parties advance fairly intricate competing arguments about whether Arachnid's '302 patent was "granted on" the '981 application, such that it can claim the filing date of the '981 application, and thus qualify as prior art. But defendants also argue, rather convincingly, that the '981 application is not enabling, citing to a 1991 office action in which the PTO examiner found the '981 application's specification lacked "sufficient details to enable one skilled in the art to create a computer with sophisticated audio production capabilities." Def. Statement of Facts, Ex. 42 at 3. Although plaintiffs reply to this argument—in a footnote on the last page of their reply brief—they do not explain how this finding might affect the '302 patent in terms of how much of its substance can be prior art to the '350 patent. Accordingly, the Court will not consider the '981 application or the '302 patent as prior art for present purposes. The issues raised by defendants and left unanswered by plaintiffs mean that there is no sufficient basis on which to find, by clear and convincing evidence, that the '350 patent is anticipated by either of these possible prior art references.

The Court turns to the remaining prior art references that plaintiffs say invalidate the '350 patent. But first, a reminder about the applicable legal principles: a patent that has issued carries a presumption of validity. 35 U.S.C. § 282; *Avia Group Int'l, Inc. v. L.A. Gear Cal.*, 853 F.2d 1557, 1562 (Fed. Cir. 1988). As a result, party challenging a patent's validity on anticipation grounds bears the burden of showing, by clear and convincing evidence, that all of the elements of the asserted claims, properly construed,

are present in a single item of prior art. See, e.g., *Zenith Elecs. Corp. v. PDI Commc'n Sys., Inc.*, 522 F.3d 1348, 1363 (Fed. Cir. 2008) (citing *Tate Access Floors, Inc. v. Interface Architectural Resources, Inc.*, 279 F.3d 1357, 1367 (Fed.Cir.2002)). A party that claims invalidity on obviousness grounds must show, by clear and convincing evidence, that the differences between the prior art and the claimed invention "are such that the subject matter as a whole would have been obvious at the time the invention was made." 35 U.S.C. § 103(a). To establish obviousness, it is not enough to show that each element of a patent was independently known in the prior art; rather, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007); see also *DyStar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006). Because plaintiffs are moving for summary judgment on the invalidity issue, they must meet this exacting burden of proof. See *Zenith Elecs.*, 522 F.3d at 1357 (citing *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1327 (Fed. Cir. 2001)).

Defendants' only argument on the merits of anticipation, contained in two short paragraphs of their brief, is that the '573 and '004 patents cannot anticipate the '350 patent because neither says anything about a jukebox. Def. Opp. Br. at 34. Plaintiffs counter that this is mere formalism that fails to address the substance of the '350 patent's claims in light of the prior art. The Court agrees. As Dickinson's expert report bears out, that the '004 patent is directed to a karaoke machine and not a jukebox is of no consequence. The karaoke machine only adds to what is claimed by the '350 patent

by allowing users to sing along with musical selections that are selected, transmitted, stored, and played back through mechanisms essentially identical to those claimed in the '350 patent. See *Vivid Techs.*, 200 F.3d at 811.

In his invalidity report, Dickinson opines that the '004 patent anticipates claims 17, 19, and 20 of the '350 patent and that the '573 patent anticipates claims 17, 19, and 21. The Court has reviewed these sections of Dickinson's report and the underlying materials carefully and determines that there is no genuine issue of material fact as to anticipation.

With regard to claim 17 of the '350 patent, for example, Dickinson shows that each claim element was present in both the '004 and '573 patents: the "improved jukebox for connection to a central music store by way of a data telecommunications line" required by claim 17 is found in the '004 patent's disclosure of an "apparatus . . . connected to an external host computer via a public communication line [that] enables a user to select any desired musical piece or song." Pl. Statement of Facts, Ex. 35 at 2:40-44, and in the '573 patent's disclosure of a method for distributing "desired" digital audio signals via telecommunications lines to a "second memory," i.e., a receiving unit with a memory. *Id.*, Ex. 36 at 6:18-21.

With regard to claim 19 of the '350 patent, Dickinson opines that the '004 patent meets the "mass storage memory compris[ing] a fixed disk" limitation because it discloses a memory "that includes fixed disks that were available at the time of filing of the '400 application." Dickinson Infringement / Invalidity Report ¶ at 120. The '004 patent does not refer to fixed or hard disks. Dickinson offers no support for this assertion of contemporaneous availability of fixed disks, however, beyond his bare

opinion. The Court has rejected this kind of bare opinion from Dickinson's opposite number in relation to what the technical abilities of a person of ordinary skill would be in relation to updating jukebox technology. Though Dickinson does not go as far as Meldal does on this point, the Court is not comfortable accepting this reasoning as a basis on which to grant summary judgment of invalidity. Dickinson does, however, point to language in the '573 patent that discloses a hard disk for storage of digital music data, thus showing that the elements of claim 19 of the '350 patent are found in this piece of prior art. With regard to claim 20 of the '350 patent, Dickinson demonstrates that the "intermediate" and "cache" memory limitations are present in the '004 patent, which discloses both main and auxiliary memories.

With regard to claim 21 of the '350 patent, Dickinson demonstrates that the "intermediate memory," payment unit, and computerized storage and processing of data limitations are all present in the '573 patent. The '573 patent discloses a "Play Back Random Access Memory Chip" that stores replica files of songs stored permanently on the Hard Disk and operates as a "temporary staging point for the Digital Audio Music." Pl. Statement of Facts, Ex. 36 at 4:64-5:2. The '573 patent also discloses a step of "transferring money electronically via a communication lien [sic]" to pay for the transfer of audio files from a first (i.e., central server) unit to a second (i.e., receiver) unit. *Id.* at 6:8-9. Finally, the '573 patent discloses "recall[ing] stored music for playback as selected/programmed by the user" from a memory in which audio files are stored. *Id.* at 2:36-37.

Accordingly, plaintiffs are entitled to summary judgment as to invalidity of claims 17, 19, 20, and 21 the '350 patent on anticipation grounds. Because the Court reaches

this result, it need not consider plaintiffs' obviousness arguments. That said, the Court notes that these arguments are predicated on the use of the '981 application as prior art, which the Court has declined for present purposes to do.

II. Defendants' motion for summary judgment

Defendants move for summary judgment on the invalidity of the '189, '575, '398, and '834 patents on obviousness grounds. They also move for summary judgment of non-infringement of the '230 patent and invalidity of the '834 patent over the inventors' failure to submit a new oath in connection with a predecessor continuation-in-part application.

A. Plaintiffs' request to strike Dr. Meldal's declaration

As they did in connection with their own motion, plaintiffs raise a threshold issue by asking the Court to strike Meldal's declaration in support of defendants' motion. As before, plaintiffs argue Meldal's declaration departs sufficiently from the invalidity opinions and supporting analyses found in his September 2007 report that it violates both the Court's expert discovery scheduling order and Federal Rule of Civil Procedure 26(a)(2)(B), which requires disclosure of expert opinions and supporting analyses during discovery, and so should be stricken under Rule 37(c)(1). Specifically, plaintiffs argue Meldal's declaration relies on more extensive prior-art combinations than his report did and changes certain base references, among other things. Defendants counter that Meldal's expert report gave plaintiffs notice of Meldal's opinions and that his declaration does not offer any substantially new opinions, prior art references, or combinations thereof.

The Court has already set out what Rule 26(a)(2)(B) requires and its underlying "ambush" rationale, as well as the contours of the Court's discretion in applying the Rule 37(c)(1) sanction. In brief, the idea is to prevent unfair surprise and costly delays associated with novel expert opinions submitted after the close of expert discovery.

1. The '189 and '575 patents

Plaintiffs argue that Meldal's obviousness opinion on the '189 and '575 patents is new because he stated in his expert report only that "the Frank patent in combination with any one of [identified user attract references] renders obvious the inclusion of a user attract mode in the Frank patent," Meldal Invalidity Report ¶ 178,⁹ but now opines that various combinations of three or more references render these patents' claims obvious. This, plaintiffs say, amounts to "relying on new combinations of prior art." Pl. Opp. Br. at 5. Plaintiffs also take the view that claim charts reflecting Meldal's obviousness analysis, submitted for the first time with his declaration, point to impermissible new opinions (the claim charts in his report dealt with anticipation only).

What guidance the Court has found on the problem plaintiffs raise—i.e., the asserted novelty of the precise prior art combinations Meldal now puts forward to support his obviousness opinions—does not support application of the Rule 37(c)(1) sanction. In *Discovision Assocs. v. Disc Mfg., Inc.*, 25 F. Supp. 2d 301 (D. Del. 1998), the court rejected the patentee's motion to strike a "surprise" invalidity argument, despite defendant's undisputed failure to disclose the precise combination of two prior

⁹ This passage of Meldal's report relates specifically to the '189 patent. But, after giving his view of the relationship of the two patents, Meldal opines that "[a]ll the reasons that the Frank patent anticipates the '189 patent and renders it obvious thus apply equally to anticipate the '575 patent and render it obvious." Meldal Report ¶ 248.

art references in an expert report, because the patentee "was put on notice of the proposed invalidity theories." *Id.* at 350 n.57. Specifically, the expert's report on a different patent-in-suit identified and discussed one of the prior art references, and defendant "specifically stated in its pretrial statement that [one prior art reference] would be used in combination with, among other things, [the other] to support its invalidity defense." *Id.* The court therefore declined to apply the Rule 37 sanction.

Similarly, in *Roche Diagnostics Corp. v. Selfcare Inc.*, 233 F. Supp. 2d 1038 (S. D. Ind. 2002), vacated in part on reconsideration on other grounds, 247 F. Supp. 2d 1065 (S.D. Ind. 2003), the court said it was "troubled by the difference in level of detail between" an expert witness's report and the declaration submitted in opposition to a summary judgment motion but found the declaration "largely admissible" on the basis of factors also present in this case. *Id.* at 1058. Specifically, the expert's report disclosed all of the prior art references used to reach his opinion on invalidity contained in the later declaration. Moreover, the court found it "not dispositive" that the expert "chose not to make in chart form an element by element comparison of the [disputed] patent claims with disclosures in the prior art references." *Id.* The report was sufficient to put the moving party "on notice." *Id.*

The Court agrees generally with the approach of *Discovision* and *Roche Diagnostics*. It is hardly "relying on new combinations of prior art" when each of those references is disclosed in an expert report and the thrust of the later declaration is the same as that of the expert report: namely, that Frank's computer jukebox and the attract mode taught by various references render the '575 and '189 patents obvious.

Indeed, at least with respect to the attract mode issue, Meldal does not appear to suggest in his declaration that more than one such reference is strictly necessary. Rather, he identifies Herring as one example and then adds that "Beall . . . also describes an attract mode" (though he also clarifies that Beall, unlike Herring, discloses an electronic game with a user attract mode). Meldal Decl. ¶ 71.

Plaintiffs are correct, however, that Meldal's declaration builds the Sidi reference into its obviousness analysis in a new way. Specifically, Meldal opines in his declaration that claim 10 of the '189 patent, which requires the processor to control the information shown on the jukebox's display to include an updated library of songs, is obvious in light of the Frank and Sidi references, the latter of which discloses updating a song library. See Meldal Decl. ¶ 114. In his report, however, Meldal simply says that claims 2 and 10 are "obvious in light of Frank" because "[i]t would have been obvious to one of ordinary skill to include a mechanism to cause the jukebox to display the newly added songs." Meldal Invalidity Report ¶ 184. This is a bare opinion with no citation to any prior art reference except Frank. Thus, plaintiffs were not on notice of Meldal's new opinion regarding these claims, because his earlier opinion did not point to any need to combine references. Accordingly, the Court will strike the portion of Meldal's declaration in which he opines that claim 10 is obvious in light of these two references combined.

Defendants have offered no argument that their failure to disclose this opinion is substantially justified or harmless under Rule 37(c)(1). Defendants do say that Meldal's report "gave plaintiffs notice" of his opinions. Def. Reply at 3. The Court does not, however, understand this to be an alternative to their argument that Meldal's declaration

"introduces no new opinions, no new prior art, and no new facts on which his opinions are based, and thus fully complies with the [discovery] rules." *Id.* at 2. Defendants' stance is unitary: plaintiffs' argument that Meldal's new declaration violates Rule 26(a)(2)(B) is "a misplaced attempt to avoid the merits," they say. *Id.* at 3. Thus, defendants' invocation of notice does not imply the same rationale as that found in *Discovision* and *Roche Diagnostics*. It follows that it does not amount to an argument that the admission of Meldal's new opinion on this point would be harmless. Nor does the Court consider it to be harmless. Plaintiffs now find themselves confronted at the summary judgment phase with new analyses, whose underlying rationales and potential weaknesses they cannot explore without re-deposing Meldal.

Nor does it appear that there is any reason Meldal could not have formulated and defendants disclosed this opinion in timely fashion. There is no suggestion, for example, that he did not have access to this particular prior art reference at the time he submitted his original report or that the obviousness issue was not in the case at the time. See *McCarthy v. Option One Mortgage Corp.*, 362 F.3d 1008, 1012 (7th Cir. 2004). Obviousness was very much an issue when Meldal submitted his initial report. For these reasons, this violation of Rule 26(a)(2) is not substantially justified.

Meldal also opines that the limitation of claim 1 of the '575 patent that requires the jukebox to receive a "song record" as well as an audio file is obvious in light of Frank combined with Sidi. Meldal cites Sidi to show that "[i]t was known in the art to send song identity data over networks." Meldal Summ. Judg. Decl. ¶ 76. This use of Sidi is also new. In his report, Meldal states with respect to the '575 patent that "it would have been obvious to create . . . a jukebox [with an attract mode] in light of the

prior art disclosing updatable jukeboxes, including the Frank patent . . . the Sidi patent" and others. Meldal Invalidity Report ¶ 250. Thus, his use of Sidi as a prior art reference concerned the attract mode and the "updatable" feature of certain jukeboxes, and not the transmission of song identity data specifically. Accordingly, the Court will strike the portion of Meldal's declaration in which he opines that this claim of the '575 patent is obvious in light of Frank combined with Sidi. Meldal also opines that an additional limitation of claims 2, 10, and 23 of the '575 patent, having to do with storage of song identity data, is rendered obvious by Frank in combination with Sidi. *See id.* ¶ 83. This, too, is new and will be stricken. As noted above, defendants have offered no viable argument that their failure to disclose any of these opinions is substantially justified or harmless under Rule 37(c)(1).

2. The '398 patent

Plaintiffs next argue that Meldal's declaration offers impermissible new obviousness opinions on the '398 patent because Meldal now uses Frank as his base prior art reference. Plaintiffs correctly point out that Meldal used the Arachnid PCT application, an international application identical to the '302 patent, as his base reference in his expert report. *See id.* 302, 304. Plaintiffs also argue that Meldal uses the Todd reference in a new way when he opines that it supplies the advertising limitations of the '398 patent that are missing from Frank (or the Arachnid PCT application). Meldal made only "passing mention" of Todd in connection with jukebox advertisements displayed "when no song is being played." Pl. Opp. Br. at 6.

The Court agrees that Meldal's use of Frank as a base reference in his obviousness analysis is new. Accordingly, the Court will strike paragraphs 116 through

131 of Meldal's declaration. Again, defendants have offered no viable argument that their failure to disclose any of these opinions is substantially justified or harmless under Rule 37(c)(1).

Meldal's discussion of Todd, on the other hand, is sufficiently consonant with his earlier report that the Court does not consider it new. Accordingly, it will not be stricken.

3. The '834 patent

Plaintiffs next argue that Meldal's opinion that Frank combined with Todd renders the '834 patent obvious is new because Meldal failed to name Todd as a reference that could be combined with Frank in his expert report. Rather, plaintiffs say, he offered only "generalized" views without "specific analysis as to which specific piece of prior art should be combined with Frank and why." Pl. Opp. Br. at 6. Plaintiffs are incorrect, though, when they say that "Todd was not one of the patents used" in Meldal's obviousness analysis. See, e.g., Meldal Invalidity Report ¶¶ 261, 264, 290. Thus, Meldal is simply offering a more detailed view of a combination of prior art disclosed in his expert report under one of his "any one of the [identified] pieces of prior art" formulations. The Court declines to strike paragraphs 134 through 144 of Meldal's declaration, the portion of the declaration plaintiffs identify in connection with this argument.

Plaintiffs also complain that Meldal's view of how Arachnid's prototype jukeboxes invalidate the '834 patent is new. His expert report, they correctly point out, merely recites factual details about Arachnid's prototypes, taken entirely from the deposition of Arachnid software engineer Arnulfo Penaloza, and concludes with the opinion that "the prototype jukebox described by Mr. Penaloza renders obvious the '834 patent" because

it played advertisements when no song was playing. *Id.* ¶ 360. (Plaintiffs also suggest that when asked about this opinion at his deposition, Meldal said it was meant to be an opinion about anticipation. It is not clear to the Court, however, whether Meldal also meant to disavow his opinion that the prototypes could be combined with prior art to render the '834 patent obvious.)

Meldal now opines that a skilled person "would recognize that the Arachnid prototypes could be linked to a remote central management system" through a network such as the one disclosed in Frank because they included modems. Meldal Decl. ¶ 168. He also opines that programs to control and track the timing and frequency of advertisement plays was disclosed by Todd, and that a skilled person could apply this teaching to the Arachnid prototypes. The Court agrees with plaintiffs that Meldal's opinions about the Arachnid prototypes and obviousness with respect to the '834 patent, found in paragraphs 161 to 189 of his declaration, are new. Defendants offer no viable argument that their failure to disclose any of these opinions is substantially justified or harmless under Rule 37(c)(1). Accordingly, they are stricken.

B. Obviousness of the Arachnid patents

As noted above, a party that claims invalidity on obviousness grounds must show, by clear and convincing evidence, that the differences between the prior art and the claimed invention "are such that the subject matter as a whole would have been obvious at the time the invention was made." 35 U.S.C. § 103(a). Because defendants have moved for summary judgment of obviousness, they must meet this exacting burden of proof. See *Zenith Elecs.*, 522 F.3d at 1357; *Nat'l Presto Indus., Inc. v. W.*

Bend Co., 76 F.3d 1185, 1189 (Fed. Cir. 1996).

To establish obviousness, it is not enough to show that each of the elements of a patent was independently known in the prior art; rather, it is "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR*, 127 S. Ct. at 1741; *see also DyStar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006). *KSR* holds that the process of identifying that impetus to combine should not be so rigid as to "limit the obviousness inquiry." *KSR*, 127 S. Ct. at 1741; *see also Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1357 (Fed. Cir. 2007). "[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ" to combine prior art elements in the way claimed by the patent at issue. *KSR*, 127 S. Ct. at 1741. This includes combining prior art elements not designed to solve the same problem as the one tackled by the patented invention: "[c]ommon sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like a puzzle." *Id.* at 1742. *KSR*'s rejection of overly rigid obviousness analysis also means that, in certain circumstances, a patent claim can be obvious merely because the combination of elements it claims was "obvious to try":

[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options . . . If this leads to the anticipated success, the result is likely the product not of innovation but of ordinary skill and common sense.

Id. As defendants emphasize, the Court in *KSR* noted that, in such circumstances, "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 1739.

Defendants approach the obviousness issue for the four Arachnid patents that are the subject of this motion in a somewhat disjointed way—though this approach reflects, at least in part, their view that the jury's role in determining obviousness is very circumscribed.¹⁰ First, they contend that there are no genuine disputes on any of the three Graham factors, as the factual elements of the obviousness inquiry are known, for any of the four patents. See *Graham v. John Deere of Ks. City*, 383 U.S. 1, 17-18 (1966). Defendants address the Arachnid patents individually only in connection with the third Graham factor, which concerns the "differences between the prior art and the claims at issue." *Id.* at 17. They then turn to the legal question of obviousness, which they phrase as "whether one of ordinary skill would and could combine Frank with the features of conventional jukeboxes" and computers, Def. Br. at 18, such as user attract modes, compression, and the control and tracking of advertisements. Defendants contend they are entitled to summary judgment under *KSR* because it would have been "obvious to try" these combinations for a person of ordinary skill. Defendants are not always clear which of the asserted claims of which Arachnid patents they contend these combinations affect. Moreover, the line occasionally blurs between defendants' arguments that there are no factual disputes on the third Graham factor in particular

¹⁰ Though it has no bearing on the Court's decision in this case, the Court is not in agreement with defendants' view regarding the jury's role. See generally Seventh Circuit Pattern Jury Instructions ¶ 11.3.6, Committee Comment (2008).

and their legal arguments for obviousness under *KSR*. Plaintiffs, on the other hand, analyze each patent separately, folding their arguments on the Graham factors into each of these analyses. The Court has reviewed both sides' arguments carefully to be certain of which arguments respond to which.

1. Person of ordinary skill in the art

Before reaching the individual patents, however, the Court determines that a genuine issue of material fact exists on one of the Graham factors, the level of ordinary skill in the art. Defendants now argue that "the skilled artisan possesses a high level of ingenuity and substantial problem solving abilities." Def. Br. at 8. Similarly, Meldal in his new declaration opines for the first time that the person of ordinary skill in the field "would have an understanding of computers and networks and how they operate," would understand compression of data for transmission, and "would have no difficulty updating most features of older mechanical jukeboxes to computer jukeboxes," because such conversions were "routine" in 1992. Meldal Decl. ¶¶ 6-8. Meldal did not hint at this in his expert report. There, he said only that the person of ordinary skill in the field "would have at least a bachelor's degree in the field of computer science or computer engineering field and approximately three to five years of relevant professional experience." Meldal Invalidity Report ¶ 34. Thus, the cited opinions found in Meldal's declaration are new for purposes of Rule 26(a)(2) and could properly be excluded under Rule 37(c)(1) upon a showing that substantial justification is lacking and that the change is not harmless.

Plaintiffs do not specifically ask the Court to strike this part of the declaration, instead arguing that Meldal now sets the bar higher for the skilled person than does

Dickinson, plaintiffs' expert, and thus that a genuine issue of material fact exists on this point. The Court agrees broadly that there is such an issue, though not because one expert imagines the skilled person to have a bachelor's degree while the other does not strictly require that credential. Rather, there is a genuine issue because defendants have expanded on their own, earlier position—and plaintiffs dispute the new position. See Pl. Resp. to Def. Statement of Facts ¶¶ 14-15.

There is a further problem with defendants' new position that the level of ordinary skill entails a broad knowledge of "how computers operate" and a ready ability to "updat[e] most features of older mechanical jukeboxes" as a matter of routine. The problem is that this view is an attempt to cut off the obviousness issue by proxy, by predetermining what combinations of prior art that person could be expected to try. It is thus an improper attempt to foreclose a hotly disputed issue.

The parties' respective arguments for and against summary judgment on obviousness bear this out. Defendants argue that the invention disclosed by the '575 and '189 patents differs from Frank only by "adapt[ing] features of conventional jukeboxes to a computer jukebox," Def. Br. at 14, and that a person of ordinary skill in the field "would and could combine Frank with the[se same] features of conventional jukeboxes." *Id.* at 18. Similarly, with regard to the '398 and '834 patents, defendants contend that "the difference between [these patents'] claims and Frank is advertising," *id.* at 15, and that "one of ordinary skill would have the technical knowledge to include advertisements on Frank's jukebox" in light of Todd, which discloses playing video ads on a jukebox, *id.* at 20—again, presumably because that skilled person would approach updating an electro-mechanical jukebox as a matter of simple routine.

Correspondingly, plaintiffs reject this view. For example, they argue that a person of ordinary skill working at the time of invention would not have combined Herring and Beall to reach the solution presented by the '575 patent because of "the extensive integration of receiving, storing, processing, and/or displaying digitized song data, song identity data, as well as coordinating a system that processes and displays user attract data" that this would have involved. Pl. Opp. Br. at 15. Similarly, they reject the idea that a person of ordinary skill would have combined Todd with Frank to arrive at the downloading, storage, and display of video advertisements on a jukebox because "the problems and challenges of receiving and storing digital advertisements . . . are not addressed by Todd," which discloses advertisements that are manually loaded onto a mechanical jukebox. *Id.* at 21. Plaintiffs contend, in other words, that a person of ordinary skill would not as a matter of course know how to move easily from a prior art electro-mechanical jukebox to the claimed invention.

A related issue bears raising here. In their brief, defendants cite to the Federal Circuit's decision in *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157 (Fed. Cir. 2007), to support their argument that "[s]imply adapting modern computers to older electro-mechanical devices," as they contend Arachnid did, is a *KSR*-type combination of familiar elements according to known methods to achieve a predictable result. Def. Br. at 3. The court in *Leapfrog* observed that

[a]ccommodating a prior art mechanical device . . . to modern electronics would have been reasonably obvious to one of ordinary skill in [the field at issue]. Applying modern electronics to older mechanical devices has been commonplace in recent years.

Leapfrog, 485 F.3d at 1161; see also *In re Comiskey*, 499 F.3d 1365, 1380 & n.16

(Fed. Cir. 2007) (interpreting *Leapfrog* to mean that "[t]he routine addition of modern electronics to an otherwise unpatentable invention typically creates a prima facie case of obviousness" and suggesting that rejected patent application's claims "at most merely add a modern general purpose computer to an otherwise unpatentable mental process"); *Dann v. Johnston*, 425 U.S. 219, 220 (1976).

The problem with defendants' argument based on *Leapfrog* is a lack of evidence in the record to support the proposition that "[s]imply adapting modern computers to older electro-mechanical devices is routine today." Def. Br. at 3. Nor do they offer support for Meldal's view that conversion of conventional jukeboxes to computer jukeboxes was routine for persons skilled in the art in 1992. (Meldal's statement, by invoking the time of invention and not "today," is, however, less off-base than defendants' attorney argument quoted above.) It is telling that although defendants echo in their statement of undisputed facts the first two points of Meldal's declaration about the level of ordinary skill, *compare* Def. Statement of Facts ¶¶ 14-15 *with* Meldal Decl. ¶¶ 6-7, they do not incorporate Meldal's third opinion, to the effect that a skilled person "would have no difficulty updating most features of older mechanical jukeboxes to computer jukeboxes [because s]uch updates were routine in 1992." Meldal Decl. ¶ 8.

Absent some evidentiary support beyond Meldal's bare opinion for the "routine" nature of jukebox updating at the relevant times and the ease with which a skilled person could do it, the Court is unwilling to accept defendants' Leapfrog argument as applied to this case. Defendants' failure to offer this point in Meldal's opinion as an undisputed fact supports this result.

In sum, there is a genuine dispute about the level of ordinary skill, a key factual inquiry under *Graham*, because defendants have added to their own earlier definition, apparently in an attempt to make the obviousness question a foregone conclusion. Defendants have also failed to put forward proper support for their view that a person of ordinary skill in the field could, without difficulty, update conventional jukeboxes with Frank, Todd, and other references to arrive at the claimed invention. On the contrary, plaintiffs' arguments against obviousness establish a genuine issue of material fact as to whether a person of ordinary skill could simply combine familiar elements using known methods to reach a predictable result in the form of the claimed invention. Thus, defendants are not entitled to summary judgment of invalidity for obviousness on any of the Arachnid patents.

2. Pending re-examinations of the Arachnid patents

Defendants have recently supplemented their summary judgment materials to reflect developments in PTO re-examination proceedings concerning the four Arachnid patents at issue here. Specifically, defendants have requested that the PTO re-examine the patentability of the patents-in-suit. The PTO recently granted those requests after making the requisite finding that "substantial new questions of patentability" exist. Defendants present these findings as definitive resolutions in their favor of various issues the parties contest in this litigation. The Court is not persuaded, however, that the PTO's threshold findings of substantial new questions of patentability provide significant support for defendants' motion for summary judgment on invalidity. There are two reasons for this.

First, as plaintiffs point out, this finding by the PTO involves a rather low standard

concerning whether the issues raised in the petition for re-examination were considered in examination the first time around—that is, when the original application that resulted in the patent was examined by the PTO. *See Arlington Indus. v. Bridgeport Fittings, Inc.*, 345 F.3d 1318, 1324 (Fed. Cir. 2003). More pointedly, the Federal Circuit has observed that "the grant by the examiner of a request for reexamination is not probative of unpatentability. The grant of a request for reexamination . . . does not [even] establish a likelihood of patent invalidity," given the high percentage of re-examination requests that the PTO grants and the much lower percentage of reexamined patents that are completely rejected. *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1584 & n.2 (Fed. Cir. 1996).

Second, it follows that the PTO's grant of Ecast's request for re-examination affords little support to defendants in the sharply different procedural context of summary judgment in this Court, where it is defendants' burden to establish that there is no genuine issue of material fact and that they have shown invalidity by clear and convincing evidence. Thus, defendants' supplemental submissions regarding the re-examination proceedings do nothing to alter the Court's thinking on their motion for summary judgment.

3. The Arachnid prototypes as prior art to the '834 patent

Defendants seek summary judgment on the invalidity for obviousness of the '834 patent on a separate ground: namely, that prototype jukeboxes Arachnid placed in bars in Rockford, Illinois in 1996 are prior art to the '834 patent under 35 U.S.C. § 102(b) and thus render the patent obvious in light of Frank and Todd. The Court begins by noting

that Defendants are not arguing that the '834 patent should never have issued or that it is invalid for anticipation. "Section 102(b) provides, in relevant part, that a person may not obtain a patent if 'the invention was ... on sale in this country[] more than one year prior to the date of the application for patent in the United States.'" *Paragon Podiatry Lab., Inc. v. KLM Labs., Inc.*, 984 F.2d 1182, 1185 (Fed. Cir. 1993) (quoting 35 U.S.C. § 102(b)). Defendants quote Federal Circuit caselaw that deals with invalidity for anticipation under section 102(b). See Def. Br. at 23 (quoting *Minn. Mining & Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1301 (Fed. Cir. 2002)). But they restrict their argument to obviousness, on the theory that the prototypes are prior art that can be combined with Frank and Todd. Presumably this is because, as defendants concede, the prototypes were never connected to an operational network and did not track advertisements.

A key step in the argument defendants do make is that the application that resulted in the '834 patent should be deemed to have been filed on May 11, 1999. The contention is genealogical. May 11, 1999 is the filing date of the '400 application, of which the application that issued as the '834 patent was a continuation. Defendants say that the '834 patent can only claim priority back to that date. The contend that because the earlier '612 application, of which the '400 application was a continuation, actually did not support much of the '400 application's disclosures. By extension, defendants say, it cannot support the '834 patent's claims. As a result, they argue, the date for determining what is prior art is the date the '400 application was filed.

Defendants argue that Arachnid's placement of the prototypes in bars in 1996 was public use under the statute and that because the '834 patent's effective date—in

defendants' view, May 1999—fell more than a year later, the prototypes are prior art to the '834 patent. As such, defendants contend, the prototypes can be combined with Frank and Todd to render obvious the claims of the '834 patent.

Plaintiffs counter with an earlier effective date for the '834 patent—one that would eliminate the section 102(b) issue—and argue that defendants have not put forward clear and convincing evidence of the later date. They argue in the alternative that evidence of experimental testing of the Arachnid prototypes in those bars means defendants are not entitled to summary judgment on the issue of section 102(b) public use. Finally, plaintiffs reject defendants' obviousness argument on the merits.

Defendants' position rests on multiple contingencies; as plaintiffs point out in their corresponding alternative arguments, the existence of a genuine issue of material fact on any of one of these premises derails defendants' obviousness argument. First, if the '834 patent can properly claim priority back to April 25, 1996, there is no need to reach the question of public use, let alone obviousness. On this score, however, the Court determines there is no genuine issue as to the '834 patent's effective date, at least with respect to the advertising-related limitations of the independent claims. Again, defendants say that the '400 application "broke the continuity of disclosure" under *Lockwood v. Am. Airlines*, 107 F.3d 1565 (Fed. Cir. 1997), by adding new matter not disclosed in the parent '612 application.¹¹ Def. Br. at 24. Somewhat confusingly,

¹¹ Defendants also argue, in a separate section of their brief that does not appear to relate to any of the issues on which they seek summary judgment, that Arachnid failed properly to claim priority under 35 U.S.C. § 120, thus precluding Arachnid from claiming priority for the '834 patent back to the '612 application. It does appear that the '400 application departed from the substance of the '612 application and therefore should have been designated a
(continued...)

defendants then assert that the '612 application does not support the claims of the '834 patent, skipping over the '400 application. A direct comparison of the two applications would have been more helpful, if only to know precisely how and when the new subject matter, which does not receive the benefit of the earlier filing date, was added. See *Lockwood*, 107 F.3d at 1571 ("It is the disclosures of the applications that count."); *Zenon Envtl., Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1378 (Fed. Cir. 2007) (citing *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1346 (Fed. Cir. 2000)).

In any event, however, plaintiffs do not point to a genuine issue of fact concerning whether the advertising-related limitations found in the '834 application find support in the '612 application. Instead, they argue that Meldal in his declaration discusses only the patent's specification, and not its claims—an argument that is easily refuted, as defendants cite particular claims and limitations in their summary judgment brief. Plaintiffs also argue that the "minor mistake" of designating the '400 application a continuation of the '612 application, rather than a continuation-in-part, should not stand in the way of their claiming priority back to the earlier date. But this position lacks legal support (plaintiffs point only to the absence of authority to the contrary). More to the point, it does not create a genuine issue of material fact.

Were, then, the prototypes in public use more than a year before the effective

(...continued)

continuation-in-part, with the corresponding implications for the '834 patent's effective date. It is not clear, however, what defendants are trying to do with section VI of their brief that they do not already accomplish with their continuity-of-disclosure argument.

To the extent defendants mean for this point to relate to their argument that the '834 patent is invalid because the '400 application, which was properly a continuation-in-part application, lacked a new oath, the Court addresses it in the main text below.

date? The Court agrees with plaintiffs that the evidence of experimental use means defendants cannot make, on summary judgment, the showing that the undisputed facts establish public use clearly and convincingly. See *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1379-80 (Fed. Cir. 2005); *Lisle Corp. v. A.J. Mfg.*, 398 F.3d 1306, 1316 (quoting *TP Labs., Inc. v. Prof'l Positioners, Inc.*, 724 F.2d 965, 971 (Fed. Cir. 1984)) ("if the challenging party presents a prima facie case of public use, the patentee must come forward with 'convincing evidence' of experimental use to counter that showing . . . In other words, the patentee must simply produce sufficient rebuttal evidence to prevent the party challenging the patent's validity from meeting its burden of proving by clear and convincing evidence that the invention was in public use."). Plaintiffs point to testimony by both Martin and Tillery, the named inventors, that the prototypes were placed in bars—which they described in their depositions as "test sites"—as part of Arachnid's work on improving the devices' user interfaces and overall ability to function smoothly in what Arachnid expected would be the environment where later, non-experimental versions would be employed. They also point to evidence that suggests Arachnid was not commercially exploiting the prototypes and that it retained ownership of them. Defendants' counterargument reduces to a flat denial that evidence of experimental use may negate the prongs of the "public use" test set forth in *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55 (1998). The Federal Circuit has "repeatedly stressed," however, that defendants' position is wrong. *Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp.*, 488 F.3d 982, 998 (Fed. Cir. 2007) (quoting *EZ Dock v. Schafer Sys., Inc.*, 276 F.3d 1347, 1351 (Fed. Cir. 2002)).

Because defendants have not established via their motion that the Arachnid prototypes were in public use for purposes of § 102(b), the Court need not consider defendants' obviousness arguments, which depend on the opposite result being reached.

C. Validity of the '834 patent for missing new oath

Defendants next argue that the '834 patent is invalid because the '400 application lacked a new oath by the inventors, as is required for continuation-in-part applications under 37 C.F.R. § 1.63. The inventors instead filed with the PTO a photocopy of an earlier oath. Defendants insist that the new oath is "not optional," Def. Reply at 13, and that the patent is invalid without one. Plaintiffs counter that violations of PTO rules only invalidate patents if they are fraudulent or amount to inequitable conduct, which the inventors' filing of a photocopied oath was not (nor do defendants say it is).

"Absent proof of inequitable conduct, . . . the applicant's absolute compliance with the internal rules of patent examination becomes irrelevant after the patent has issued." *Magnivision, Inc. v. Bonneau Co.*, 115 F.3d 956, 960 (Fed. Cir. 1997). Because a patent that has issued enjoys a presumption of validity, and because defendants point to no evidence of the fraud or inequitable conduct that would be required to put the '834 patent's validity into question, the Court determines that defendants are not entitled to summary judgment of invalidity on this ground.

D. Non-infringement of the '230 patent

Finally, defendants move for summary judgment on non-infringement of the '230 patent. Defendants argue that because the Ecast jukeboxes system does not involve transferring data from a "peripheral management station" to a jukebox via a "third link," there can be no infringement. The Court construed both of these terms in its claim construction opinion. The Court adopted defendants' proposed construction of "peripheral management station," which is "a computer that is used to manage jukeboxes." *Rowe Int'l Corp. v. Ecast, Inc.*, 500 F. Supp. 2d 891, 913-14 (N.D. Ill. 2007). The Court construed "third data link" as "a third communications link that is either a separate link or a combination of the first and second links." *Id.* at 914. The first link is that between an "operator group" of jukeboxes and the main data server. The second link is that between the peripheral management station and the main data server.

Invoking these constructions, defendants argue that (1) operators of Ecast-powered jukeboxes may request changes to the jukeboxes' parameters, but do not "manage" them, and (2) no link is formed or message conveyed from the operator's computer to the jukebox. Instead, the jukebox periodically inquires—so to speak—about changes to its parameters; if the jukebox operator has requested such a change through Ecast Central, then the jukebox's next inquiry to the Ecast database server will yield a notice that its parameters have been updated. The jukebox then obtains an updated copy of its parameters over the Internet from the Ecast database server. All of this, defendants say, happens on the jukebox's own initiative, so to speak. Data is not relayed to it from the peripheral management station via the main data

server.

Defendants also argue that Dickinson's statement that the '536 patent (also called the Marimba patent) is "fundamentally different from the '230 patent's methodology" is a major concession, suggesting that "Dickinson apparently forgot that Ecast's system is based on Marimba." Def. Br. at 32.

Plaintiffs counter that jukebox operators do in fact engage in "management" of their jukeboxes by logging onto Ecast Central and making changes; they say that defendants' characterization of this process as merely sending "requests" cannot avoid infringement. According to plaintiffs, this provision for operators to send messages via computer that result in changes being made at the jukebox "is exactly what the Ecast network is designed to enable jukebox operators to do." Pl. Opp. Br. at 31. The Court agrees that there is at least a genuine issue of material fact with regard to whether operators' use of their computers to identify desired changes constitutes "management" of these jukeboxes. A reasonable jury could apply the Court's construction of "peripheral management station" to this aspect of the Ecast system to find infringement.

With regard to the "third link," plaintiffs accuse defendants of revisiting a losing argument about "switching" or relaying of messages that defendants made during the claim construction phase. This appears to the Court to capture one aspect of defendants' somewhat unclear argument on this point. The second aspect is defendants' insistence that it is through the jukebox's own agency—so to speak—that it seeks out and opts to receive new parameters over the Internet. In other words, the jukebox is not merely a passive recipient of data sent over a bipartite link from a peripheral management station to the central server and from there to the jukebox.

Again, the Court takes the view that irrespective of which entity initiates a given transaction, a reasonable jury could determine that there is a third link over which new parameters travel from the operator using a peripheral management station to a jukebox via a central server. Moreover, plaintiffs point to evidence that Ecast-powered jukeboxes inquire about new parameters or other updates regularly, approximately every thirty minutes. This evidence suggests that the jukebox is not free—so to speak—to inquire about updates when and at whatever intervals it pleases to do so. Thus, it points to an effectively continuous link between the parameters selected at the peripheral management station and changes that are implemented at the jukebox within a predictable timeframe.

Plaintiffs reject defendants' Marimba argument on two grounds. First, defendants have not shown that their system is "based on" Marimba. Second, Dickinson's statement about the fundamental differences between the two systems had to do with a different variable—namely, whether jukeboxes are programmed to select their own changes. On this variable, plaintiffs say, both the Ecast system and the one disclosed by the '230 patent are the same. Again, the Court agrees that at a minimum, plaintiffs have pointed to a genuine issue of material fact on this point by showing that operators' ability to send messages via computer that result in changes being made at the jukebox "is exactly what the Ecast network is designed to enable jukebox operators to do," Pl. Opp. at 31—in common with the invention disclosed by the '230 patent but not the Marimba patent.

For these reasons, defendants are not entitled to summary judgment of non-infringement of the '230 patent.

Conclusion

For the reasons set forth above, the Court grants plaintiffs' motion for summary judgment in part and denies it in part [docket no. 175] and denies defendants' motion for summary judgment [docket nos. 178 & 182]. The case is set for a telephone status hearing on August 29, 2008 at 9:30 a.m. to discuss scheduling of the trial. Lead trial counsel are to participate in the status hearing unless they are unavoidably unavailable. One side's counsel should get the other side's counsel on the telephone and then call chambers.


MATTHEW F. KENNELLY
United States District Judge

Date: August 25, 2008